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ABSTRACT

This document records the oral and written testimony given at a hearing on preparation of the work force for the year 2000 and beyond. Testimony was given by Senator Barbara Mikulski; John Lynch, whose company prepared the report, "Workforce 2000"; Joan Patterson and Nelson Brooks, coexecutive directors of the United Auto Workers-Chrysler National Training Center; Clifford Ehrlich, senior vice president of human resources for Marriott Corporation; David L. Crawford, executive director of the Secretary's Commission on Work Force Quality and Labor Market Efficiency; and Ira Magaziner, chairman of the Commission on the Skills of the American Work Force. Remarks centered on issues such as a national labor shortage, a mismatch between skills needed in the workplace and the actual skills of workers, an aging work force, a culturally diverse work force, more women in the work force, and changing worker values and life-styles. Examples of programs to meet these challenges by making the workplace more attractive to work force nonparticipants, providing remedial education, and providing technical education were discussed. (KC)

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S. HRG. 101-888

# MEETING THE CHALLENGES OF A NEW WORK FORCE

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## HEARING

BEFORE THE

## COMMITTEE ON LABOR AND HUMAN RESOURCES UNITED STATES SENATE

ONE HUNDRED FIRST CONGRESS

SECOND SESSION

ON

EXAMINING THE WAY IN WHICH THE CHANGES IN OUR WORKFORCE AFFECT THE ROLE OF BUSINESS AND THE FEDERAL GOVERNMENT IN MEETING CHANGES IN WORKFORCE AND WORKPLACE NEEDS

JULY 19, 1990

Printed for the use of the Committee on Labor and Human Resources

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# MEETING THE CHALLENGES OF A NEW WORK FORCE

THURSDAY, JULY 19, 1990

U.S. SENATE,
TASK FORCE ON WORK FORCE AND WORKPLACE READINESS,
OF THE COMMITTEE ON LABOR AND HUMAN RESOURCES,
*Washington, DC.*

The hearing convened, pursuant to notice, at 1:35 p.m., in room SD-430, Dirksen Senate Office Building, Senator Barbara Mikulski presiding.

Present: Senators Mikulski, Simon, and Durenberger.

## OPENING STATEMENT OF SENATOR MIKULSKI

Senator MIKULSKI. Good afternoon, everybody. I want to welcome you to this public hearing of the Task Force on Work Force and Workplace Readiness.

You will have to excuse me. I have a very bad case of laryngitis. Some germs have done to me what my opponents have never done, which is to slow me down or maybe even shut me up a little.

However, being a Senator, I won't let laryngitis prevent me from talking. I want to welcome everyone here, along with my co-chair of this task force, Senator Durenberger, who I know will have his own remarks.

Just by way of background, we are an informal group bound together by a common interest in America's workplace. This task force was really Senator Durenberger's idea. It came out of a dinner at Senator Kennedy's house when we talked about how we should be proceeding on issues, and Senator Durenberger suggested we take a long range look rather than the short-term solutions that our legislative approach often lends itself to.

We have been holding a series of informal breakfast meetings to discuss with various leaders the work force readiness and workplace readiness issues.

Today, because of the report that has been issued, we wanted to have a large, open public hearing, and we want to thank all of you who are here for participating. We look forward to your comments and then, rather than the traditional approach of a Senate hearing, where we act like we're taking your deposition, we thought we could engage in more conversation that would give the Senate ideas and direction on what to do.

I have often said that we have to organize ourselves around the year 2000 and get ready for it. As of this afternoon, there are 3,452 days left, and we've got a lot to do. And what we find is that very

often the business community continues to exhort us to get the work force ready, which I believe we must, but in turn there are many of us who believe we've got to get the workplace ready.

Eighty percent of our new workers will be women, minorities, or new immigrants. Half of the work force will be women, most with children. Two-thirds of the new jobs will demand training beyond high school. Yet at the same time, we find that while the work force is changing, the workplace is not.

I know, speaking as a woman, very often the workplace assumes that I am going to act like a guy, but in a skirt, that I will have the same schedule, the same responsibilities, and even the same approach to problem solving, which might or might not necessarily be true, and that the value that women and people of color and of all backgrounds bring is often not recognized; that we have built our whole society on a European culture. That is never in any way to minimize that, but we are a planet of eight different continents, and for people like myself, with a last name like Mikulski, I never believed in the melting pot.

When my great-grandmother came here 100 years ago on a prearranged marriage, she didn't melt. She brought 1,000 years of history that goes back to Queen Jadwiga and Tadeusz Kosciuszko and Nicolaus Copernicus and Madame Curie, and now we see it in Lech Walesa and names like Mazowiecki and names like Mikulski.

And in not melting, many of us think of America as a mosaic in which, as we come to this country—and some of us came in chains, and some of us came to escape chains—that as we come, we bring thousands of years of history and culture from whatever continent that we come to this great country from. And when we come to the workplace or we come to our community, we bring that culture with us. We are therefore a mosaic.

I like to think of America as a mosaic, that as we come, each one of us is an important part of the picture, and that without any one of us and our cultures, the American picture is incomplete.

Having said that, then, the question is how do we reorganize the thinking of the workplace to understand this enormous opportunity to embrace the cultural diversity that is in our country, and around the world because I believe as we get to know other Americans, we are going to know how to do business around the world more effectively.

[The prepared statement of Senator Mikulski follows:]

PREPARED STATEMENT OF SENATOR MIKULSKI

Senator MIKULSKI. Good morning, I'd like to welcome everybody to the first public hearing of the Labor Committee Task Force on workforce and Workplace Readiness.

We are an informal group bound together by a common interest in the future of America's workplaces. The point of this task force and this hearing is to get outside of the usual bill by bill consideration of programs and policies—and take a step forward to look at how we will adapt to changing workforce and workplace needs.

Are the workers going to be ready for the future jobs? Will the workplaces be ready for the future workers?

We've learned that the old ways won't work. A new century is coming. A new economy is being born. There are only 3,452 days left until the year 2000.

By then, 80 percent of our new workers will be women, minorities, or new immigrants. Half the workforce will be women, most with children. Two-thirds of the new jobs will demand training beyond high school.

Today, we'll look at difficulties faced by the American business community and hear the results of a survey which reveals that most companies run their businesses like we were still in the 1950's. And we'll learn about ways in which innovative companies are preparing for the 21st century.

We won't succeed if we're trying to force new employees of every shape and size into one standard slot. But each challenge we face is an opportunity—every change in the workforce brings new talent and ideas into our economy. Diversity is a strength; it means new ways of looking at problems—and unique and innovative solutions.

We'll hear that businesses aren't spending enough on training—95 percent of the money going into improving worker skills is spent by 1 percent of our companies. Technical training, good public education and access to college and vocational schooling aren't expenses, they're investments.

We ought to invest as much in the people who work in factories and office buildings as we do in the computers and robots they have to use every day. We need as many daycare slots as parking spots.

Women are probably our Nation's most underutilized resource. They are an unappreciated asset of enormous size and immeasurable potential. Meeting the needs of working women and two-income families brings talented people into the workforce and keeps trained workers on the job.

Businesses ought to look at child care, family leave, and job training as employer benefits—they help create a more stable and productive workforce. We need to move beyond the stereotypes of the 20th century. We need 21st century attitudes to solve 21st century challenges.

The very same nations who spent the last two decades surpassing the United States in economic efficiency, are fare ahead of the United States in meeting the needs of their own working families. Flex-time, on-site day care and family leave programs have made their economies stronger. They're preparing for the new millenium.

This hearing is about making the American economy competitive—about economic survival. American business can meet the challenges of the next century. And the Federal Government should be there to lend a hand. Today, we're finding out how we can work together to build a framework for the future. The time for action is now.

So having said that, we want to thank again the people who are here, and we are going to move on to the discussion, but I'd like to turn to the founding father of this task force, Senator Durenberger.

OPENING STATEMENT OF SENATOR DURENBERGER

Senator DURENBERGER. Well, thank you. Like all founding fathers, we couldn't do it without founding mothers, and I guess the difference between Barbara and me is a lot smaller than one might assume. I am only half Polish; we are both Catholic, I think, in our religion, and we both represent States that are immigrant States and that are predominantly women rather than men.

I happen to represent a State that I just discovered this noon has got the second-largest Laotian and Mong population in it next to Fresno, California. And I could go on and on with those kinds of statistics.

But the thing that we most have in common is an obligation to change public policy and try to learn from the past in developing the future.

As chair, she is correct in saying that the thought occurred to me when we were at the chairman's house last year that—and this is only because I was new to the Labor and Human Resources Committee that the kind of legislation that I saw us generating on this committee was born in the Thirties and the Forties and the Fifties and repeated every authorization cycle. Each time there was a new opportunity to do good, our wonderful chairman seized it. Some people say it is the frustrated President in him, and I said no, it is the frustrated American who always seeks to find a better way to do things. And that is one of the things that is uniquely American about us.

My suggestion was simply that we re-look at the title of the committee—Labor and Human Resources—and its relation the needs of the 1990's and in the year 2000. And that is what we have been doing ever since. I think both of us took this on thinking it would last for maybe 6 months or a year, and we'd have a bunch of great ideas and have some hearings, and all of a sudden we would be able to reformulate public policy. But it is not that easy because one of the things I have learned being here is that in large part public policy is not a matter of how much money you have to spend or what the deficit is or how high taxes are, or even what your political leadership is. Public policy is largely a matter of society's values. You cannot listen to the Senator from Maryland speak without understanding something about how deep her values go.

But when translated into the public policy of the Eighties and the Nineties, you can't say that the rest of us all have that same set of values.

We had a hearing down the hall in the Environment Committee earlier this week on an Infrastructure Council which our colleague from New York thinks would be a wonderful thing to put in place at the national level so we can start dealing with infrastructure in America. He made the comment that in a time when we don't have much money at the Federal Government level, it is kind of hard to do.

And I said, "Mr. Chairman, at a time when we had all kinds of money we weren't building infrastructure, either. We were just spending money." It is an issue of values, it really is an issue of values—do you want to do prevention in health care, or do you want to just spend money on medicine? Do you want to raise the

value of work in America, or do you just want to spend your time talking about mandated benefits and this, that and the other thing?

Unless we revalue work or labor or the human capital contribution that goes with everything else, it is pretty hard to make public policy make a lot of sense.

So the one thing I know both of us have in common as we share this very difficult challenge is probing for the values, and in doing that, trying to learn from the experiences of people who are already in the workplace, dealing with these issues.

So I think we know a lot about demographics now, and we know a lot about selected efforts on the part of some companies as employers and unions representing employees to deal with these problems. The challenge before us today is to deal with the results of the Towers Perrin report and various people's reactions to it and what the workplace is doing and thinking. The five or six of you who are here are also faced with the awesome task of trying to impress everybody who is not here today with what we ought to be doing.

So I thank you for coming here and sharing your time with all of us.

Senator MIKULSKI. Thank you, Senator Durenberger.

We are going to now turn to John Lynch, who was recently elected President of Towers Perrin, a worldwide management consulting firm.

Mr. Lynch will talk to us about the very interesting findings of the survey Towers Perrin and the Hudson Institute conducted on how businesses are dealing with work force changes.

Mr. Lynch.

## STATEMENT OF JOHN LYNCH, PRESIDENT, TOWERS PERRIN

Mr. LYNCH. Thank you. Madam Chairwoman, Mr. co-chairman, distinguished guests, on behalf of all my colleagues at Towers Perrin, I want first to thank you for this opportunity to contribute to the public policy discussion on issues related to Workforce 2000.

I ask that my testimony and the survey report be made part of the record of this hearing.

Senator MIKULSKI. It will be.

Mr. LYNCH. The report is titled "Workforce 2000, Competing in a Seller's Market: Is Corporate America Prepared?"

When it comes to Workforce 2000, the time for action is now. The good news is that action has begun. The bad news is that action is not fast enough and is not widespread enough.

My comments are based first on the management consulting work our firm has been doing on Workforce 2000 issues, with many of our more than 8,000 clients worldwide; second, on the policy studies that we have contributed to and supported, such as the report of the Commission on the Skills of the American Work Force; and third, on the results of the survey we recently conducted with the Hudson Institute on how American corporations are responding to Workforce 2000 issues.

This survey addressed such Workforce 2000 issues as: a national labor shortage; a mismatch between skills needed in the workplace

and the actual skills of workers; an aging work force; a culturally diverse work force; more women in the work force, and changing worker values and life styles.

We believe it is the largest survey on Workforce 2000 issues undertaken to date. The information comes from some645 organizations across the country in nearly every business sector.

Our work leads us to three major conclusions.

One, Workforce 2000 changes are part of a vast change in our economic life. These changes are so profound that they require a fundamental re-examination of the public and private sector assumptions and policies governing human resource management.

The second conclusion is that such a re-examination is already underway in the private sector, largely driven by powerful marketplace forces. It is not fast enough; it is not broad enough. But it has begun.

Our third conclusion is that a much broader re-examination of workplace and work force policies involving both the public and private sectors must begin now. As our survey shows, Workforce 2000 is already here.

Let me spend a few minutes elaborating on each of these conclusions.

The changes in the work force are part of and are one of the drivers of a change in economic organization more profound than any we have experienced since the beginning of this century. Then our economy shifted from a base of farmers, tradesmen and craftsmen to large-scale organizations directed by a centralized management hierarchy.

As we have seen in our own studies and consulting work, corporate structures today appear to be headed for a radical reconstitution. They are becoming more decentralized, more flexible, and more responsive to a constantly changing and increasingly competitive global marketplace.

Authority and power in these organizations are gradually shifting from a centralized decisionmaking structure to semi-autonomous teams. These teams are characterized by the pluralism of culture, race, gender, values and skills that we call Workforce 2000.

We get some sense of this change just now underway from our survey. It shows, for instance, that 35 percent of respondent companies use employee involvement teams; 13 percent have already developed self-managed work teams, and 28 percent train supervisors to foster worker autonomy. This is something nearly unheard of until just recently.

As managers are coming to realize, policies and processes that worked in the past no longer work for the new organization and the new work force. One of the key changes managers now must deal with is that the labor market is no longer a buyer's market. It is a seller's market.

Respondents to our survey see that seller's market in several different ways. From a sheer quantitative standpoint, they see a dwindling supply, with 65 percent saying that they already experience labor shortages.

But it is also a seller's market from a qualitative standpoint. There are not enough workers with the skills employers need—

from specialized skills to basic verbal skills to simple work habit skills.

Last, the seller's market is qualitatively different because the people in it are demographically more diverse than ever before. In fact, that cultural, ethnic and sexual diversity is what our respondents say concern them the most about the work force.

Seventy-five percent say that the new ethnic and racial mix in the work force is a significant management concern. Seventy percent say that the role of women in the work force is a management concern.

All these changes . . . in the structure of work and most especially in the makeup of the work force . . . are creating powerful labor market forces to which managers must respond.

The question, then, is how have they revised their long-standing human resource policies and practices to adjust to this new reality? How are they creating "the new organization" with the "new work force?"

Our survey shows mixed results so far. The reassessment of corporate policies and practices has begun, but it is not yet widespread. Some companies have already adopted full-scale strategies to deal with the changes. Others are piloting innovative programs. But the majority have yet to introduce new programs.

For instance, in addressing what is probably the most widely discussed aspect of Workforce 2000, the labor shortage, more companies are trying a greater variety of new approaches to recruiting workers.

While the most prevalent methods . . . including job fairs and recruiting outside the local area . . . are fairly traditional, many companies are experimenting with such innovative approaches as recruiting nontraditional workers and calling back retirees.

On the issue which respondents say concerns them most . . . managing diversity . . . the overall response is again mixed.

A substantial number of companies are doing explicit minority recruitment. But less attention has been paid to programs that support new entrants once they are hired. Relatively few in general use mentor programs, support programs, or provide language and immigration assistance.

Similarly, companies' efforts to support women professionally also vary. While efforts such as formal sexual harassment policies are very common, support groups, mentor groups, and specific hiring programs for women are less so.

On the corporate response to the skills gap, there is a similar result. The most common approach to helping employees learn and improve skills, for instance, is tuition reimbursement, a program in nearly 80 percent of the survey companies.

On the other hand, only 8 percent undertake remedial training, with another 9 percent testing it, and 14 percent planning to try it.

As for the aging of the work force, corporate managers recognize that the work force is getting older. But so far, most survey respondents have not devised new policies to keep their skilled older workers at work. In fact, only a few companies are experimenting with alternatives to traditional retirement.

The apparent disparity on all the Workforce 2000 issues between "concern" and breadth of "innovative" response should not be too

surprising. We wish that the disparity were less or that the innovations were more widespread. But if our initial analysis is correct, that disparity is understandable.

Managements are being challenged to reexamine their human resource policies in the most fundamental way. They are having to rethink the relationship between the corporation and its work force. They are even having to re-think the relationship between the corporation and other social institutions, such as education.

If a great many corporations have not yet adopted remedial education programs, one reason is that to do so means recasting our usual view of which institutions in society are responsible for educating its people.

These are not simple issues.

As our survey shows, some organizations are farther along in their actions than others. Our survey also suggests what is different about those "leading edge" companies.

Our analysis strongly suggests that innovations on Workforce 2000 issues are driven by senior management concern coupled with perceived need to change. These managers are aware of and concerned about the work force and have experienced an immediate need to be inventive with management policies and practices. Where senior management awareness and concern and perceived need are relatively low, action is relatively low.

As an example, let's look at companies where concern about labor shortages has been integrated into strategic plans—a key sign of senior management concern.

In these companies, 42 percent recruit nontraditional workers—such as the elderly or the handicapped; 51 percent use a marketing approach to recruiting—in other words, selling their companies to prospective candidates in the same way they sell soap or hotel rooms. By contrast, among companies that have not yet focused on labor shortages in management decisions or strategic plans, only 16 percent recruit from nontraditional sources, and only 35 percent use this marketing approach to recruiting.

What we see in these findings—and the pattern runs throughout the survey—is that some senior managers are anticipating the significance of a seller's market. In that market, a company wants to be a preferred employer, the employer of choice.

That means they must be responsive to the interests and needs of employees. Those needs can range from child-care to mentoring for women and minorities, but they will likely vary from organization to organization.

We believe that senior managers will meet those needs when they understand that competitive pressures in the labor market will demand it of them.

These managers will discover that the way to achieve success in this very competitive labor market is by acting on the many workplace social issues that have seemed to intractable for so long.

From a policy standpoint, what should we make of these findings? Two things, I think. Both begin with the presumption that our goal in the public and private sectors is to bring to birth "the new organization," one that is responsive to its workforce and to its competitive needs as well as the Nation's.

If that is the case, then the first thing we need to understand is that the best way to achieve that end is to find ways to get more senior management become more involved in and concerned about work force issues. Most of all, we need to help more senior managers to recognize the likely impact of these issues on their business.

Then we need to encourage them to invent their own ways to express that concern and meet those needs. As Teddy Roosevelt once counselled, the facts themselves are an agent of reform; they just need exposure.

The second thing our findings say to us at Towers Perrin is that the best response to Workforce 2000 will result from a collaborative effort between the private and public sectors. Either sector working in isolation cannot adequately address the broad issues of Workforce 2000. That is a message you have heard before, will hear more of today, and have delivered yourselves.

We believe it is now time for a national coalition of business, labor and government. The coalition's mission would be to examine the impact of public policies on private initiatives to respond to these changes. Just as corporate policies and processes are being reexamined, so too should public policy undergo a comprehensive, systematic reexamination.

A reexamination should begin, we believe, with a comprehensive assessment of how existing law and regulation affect Workforce 2000 issues. The key question is this: Do our laws and regulations and their underlying assumptions act as barriers—or aids—in creating the new organization and its promise of greater effectiveness and greater humanity?

As an example, we need to reexamine in the public sector as well as the private sector the way we view older workers and retirement.

The question is: Do our present regulations governing retirement fit the new reality of work and the workforce?

Our policy—private as well as public—seems to assume that there is a sharp distinction between work and retirement.

It enforces that assumption, for instance, by the way Social Security taxes and caps earnings for someone in retirement.

That has been regarded as good public policy as well as private policy.

Yet does that policy make sense when, with the changes in the worforce, there may be every reason to keep older workers with their greater skills in the workforce in some form?

We believe questions like these make imperative our call for a thorough assessment of public policy on workforce and workplace issues.

Through this coalition, led by Congress and the executive branch, a policy context can be defined that will support a more creative and flexible economic sector.

We at Towers Perrin believe very much in the necessity of such a coalition and we stand ready to be a catalyst in its formation. We offer to help bring the private sector to it, in part by carrying the message of our findings to the corporate leadership of this country.

For today, we at Towers Perrin are honored to be part of this effort to shine a light on the changes going on in the work places of America.

For the future, we look forward to being a continuing part of that effort.

Thank you.

I will skip over and example that I have on that maybe for later discussion.

Senator MIKULSKI. Thank you, Mr. Lynch.

We want to recognize the fact that Senator Paul Simon is here, and then, in the course of introducing the witnesses, Senator Durenberger and I are going to alternate.

Senator Simon.

### OPENING STATEMENT OF SENATOR SIMON

Senator SIMON. Thank you very much.

First of all, I want to thank you for your leadership in pulling this together, and I have just a few brief remarks.

I remember when I was in the fourth grade or something like that, I studied geography, and it said the United States had achieved its high standard of living because we had all these natural resources here. And I believe that. But now, all of a sudden, the countries that are moving ahead are Japan and South Korea—countries that have virtually no natural resources—but they have invested in their people.

And that is really what Mr. Lynch is talking about.

We are going to have to do a better job. It is money in part, but it is also a change in the quality of delivery.

I have been doing a little checking, and in 1949, 9 percent of our Federal budget was devoted to education; today, it is 2 percent. Something has gone wrong in what our priorities are.

The whole question of literacy and adult illiteracy is a hidden thing, and we have to bring it out in the open. Thanks to the help of Senator Mikulski and Senator Durenberger, we have passed for the first time a comprehensive Literacy Act in the Senate, and I think within a few days the House is going to be passing the same.

But for example, Mr. Lynch just mentioned that about 8 percent of the corporations are involved in remedial training. How do we provide tax incentives—I think that is what is really involved—to encourage much more than that. How do we get corporations to do a better job; how do we get labor unions to do a better job; how do we get our schools to do a better job?

Finally, how do we get people to reach out to one another more? One of the things that is happening—and it hasn't been on the front pages of newspapers anywhere—the United States today is more economically segregated than at any time in our Nation's history. Those who need help are less and less at our doorstep. So it becomes easy to ignore them.

When I was in the House and was on the subcommittee that had jurisdiction over the VISTA Program, a volunteer domestic program, I remember being in Cincinnati, in an impoverished area, and going into a little, one-person store. In there, I found the treasurer of Proctor and Gamble, working with this man, telling him how to keep his books and everything.

When we walked out of the store, I said to him, "I can't tell you how much I appreciate what you are doing."

And he responded, "I can't tell you how much I appreciate this opportunity. I am learning about our country as I never learned about our country before."

That kind of reaching out has to take place, so that we view these problems not simply in statistical terms, but in human terms, so that we really get to understand that we have this vast, rich potential that is untapped here.

You mentioned minorities. You can get a variety of statistics, but one statistic that I think is fairly reliable is that 18 percent of the work force today is composed of minorities; 10 years from now it is going to be 29 percent.

What are we doing to really lift people and give them an opportunity? I think those are the kinds of things we have to work on, and it has to be the private sector and the public sector working together. Each of us in isolation cannot do it. Working together, there is absolutely no reason we can't do it.

I thank you, Madam Chairman. I took more time than I intended.

Senator MIKULSKI. Thank you, Senator Simon.

Senator Durenberger, why don't you introduce our next witness.

Senator DURENBERGER. Our next guest is Cliff Ehrlich, who is Senior Vice President of Human Resources at the Marriott Corporation in Bethesda. He is going to speak on some of the challenges that Marriott has faced in dealing with the changing work force and some innovative ways they have developed to address the challenges.

## STATEMENT OF CLIFFORD EHRLICH, SENIOR VICE PRESIDENT OF HUMAN RESOURCES, MARRIOTT CORPORATION

Mr. EHRLICH. Thank you.

I very much appreciate the invitation and the opportunity to participate in today's hearing, and I applaud the committee for its foresight in addressing this issue now.

My perspective on the issues of Workforce 2000 is shaped by the challenges they produce for labor-intensive businesses like Marriott. Marriott is the tenth-largest private sector employer in the United States, with just over 200,000 domestic employees. We are comprised of nine different businesses whose product is either lodging, food service, or a combination of both.

The extent to which we are labor-intensive is best demonstrated by the ratio of sales per employee using data published for 1988. Being labor-intensive means that in order to produce the same volume of sales, we require 21 times more employees as Mobil Oil; almost five times more employees as IBM; almost four times more employees as Eastman Kodak, and almost two and a half times more employees as retailer J.C. Penney.

Because Marriott is so labor-intensive, our work force already reflects the diversity of our country's labor market. Our work force is 41 percent minority and 52 percent female.

We conduct employee opinion surveys in many of our 3,000 domestic locations, and while we have been doing so in English and Spanish for years, we increasingly find ourselves having to survey

in French, Vietnamese, Cambodian, and 15 other languages, including Polish.

The skill mix we need to run our company ranges from high to low. However, we expect that during the next 5 years, it is at the entry level where skill requirements are lowest that we will face our greatest challenges in attracting employees.

Assuming that our economy will create more jobs during this time than there will be new entrants to the work force, efforts should be made to bring into the work force individuals for whom the choice of working is not currently attractive.

This may be a welfare mother who would like to develop marketable job skills, but is not prepared to do so at the cost of surrendering free child care and medical benefits. It may be a recipient of Social Security benefits who does not find work attractive because it could reduce his or her right to receive those benefits. It may be an individual to whom a flexible work schedule is essential in order to balance work and family responsibilities. He or she may prefer the latitude to work more than 40 hours a week in return for the freedom of being able to work less or not at all on alternate weeks.

However, a prospective employer of that individual is faced with the Fair Labor Standards Act, which requires payment of time and a half for hours worked over 40 in a week. This limitation was perfectly logical when work was usually manual and the oversupply of labor meant that employees had to be protected from employer exploitation. Times are different now, and this well-intended regulation may have to be refitted to suit the contemporary workplace.

In each of these cases, a change in laws would facilitate an expansion of the available labor pool.

But being able to attract new workers into the work force is only one of our challenges. Another is how to deal with the low skill level of so many new entrants to the labor force. As an employer, I am very concerned that the student product our educational system is producing is inferior to earlier models. The result is an increase in the amount of training which must be provided to entry-level workers with an accompanying increase in expense to employers. In some cases, the additional training is simply remedial help in reading, writing and arithmetic, but in other cases it has to do with job and social readiness, with emphasis on attendance, work habits, and attention span.

Whatever form this training takes, there are direct cost implications. In a labor-intensive business, all increased labor costs are significant. Another way of quantifying labor intensity for Marriott is to point out that our payroll costs—wages, salaries, benefits—represent about 38 percent of sales. This is a far greater percentage than for manufacturing companies and explains why increases in labor costs resulting from minimum wage increases or mandated health benefits are such a concern to the service sector of the economy.

The rate at which technology is upgrading work represents an additional training burden to business. To remain competitive we must adapt to changing technology, and each change carries with it the need to retrain our work force. Employers have become great providers of education and have significantly raised the skill levels

of American workers as our businesses have become more technology-dependent. The low initial skill base of the work force has compounded our problem.

Marriott's attempt to deal with this situation has taken a number of forms. For years we have been very active in employing individuals with disabilities, and while there are no government reports on the subject, we believe we employ more such people than any company in America with the possible exception of IBM. Our longstanding relationship with organizations which assist people with disabilities has given us access to this very valuable labor pool. We intend to continue to utilize this wonderful resource.

Since trying to expand the existing labor pool of prospective employees is very difficult, most of our focus has been on ways to maximize our retention of existing employees. Along this line, we conducted a survey of our work force on work and family issues about a year ago. As a result, we established a data bank covering 25 geographic areas, which enables our employees to obtain assistance in finding child care providers. We also announced 3 months ago that we will be opening an infant/toddler day care center at our headquarters in Bethesda, MD early this fall.

We have also experimented in one of our businesses with ways to expand our applicant pool and make our jobs more attractive. The management group in that business took the position that the jobs it had were products and then set out determining how best to market those products to prospective customers who were actually prospective employees.

This creative way of looking at their employment challenge allowed the group to become much more flexible in establishing work standards, work schedules, and training programs than ever before, and by so doing they have been much more successful in staffing their job vacancies.

This experiment also highlighted the need to be able to tailor employee benefits to fit diverse individual needs.

Another business, Marriott Hotels and Resorts, is totally committed to an improvement in the quality of the services it provides its customers. The centerpiece of this effort is the creation of an environment in which employees are empowered to make decisions to resolve problems themselves within broad quality and service parameters. We want Marriott Hotels to be viewed as a place where an employee can be involved and make a difference.

It is our conviction that employees today do not have less loyalty or commitment than employees had in the past; however, they will give it only in return for a meaningful work experience, and we plan to offer that to them.

In still another business, we have established an incentive system which covers employees at all levels of the organization. It provides incentive payments based on customer feedback and serves to focus the entire work force on the importance of customer service.

Workforce 2000 issues like the need to attract new people into the labor market and the need to improve the skill level of new workers are becoming clearer. However, everyone in this room today is only familiar with labor being an abundant resource. Employment legislation, management practices, and our attitudes



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about the employer/employee relationship have been created in an environment where human resources have been plentiful, and employees needed protection.

Those days are fading into history, and it is not reasonable to expect that any of us have yet arrived at an understanding of the thousands of implications of the approaching labor shortage. Our collective understanding of it will evolve gradually.

It is the evolutionary nature of this process that leads me to request the Senate to be very cautious when it is considering legislation affecting the employer/employee relationship. I understand that legislators legislate, but I hope legislation will be avoided that will interfere with the evolution we are facing. The permanence of legislation could impede this process by restraining or limiting the ability of employers and employees to reconcile differences on mutually-agreeable terms.

Marketplace solutions rather than legislative solutions should be encouraged, and adaptability, flexibility and resourcefulness should be our standards.

I believe work force issues will evolve quickly during the next decade and that our country's position as a global economic power will be best served if that evolution is as free of interference as responsible government can allow.

Thank you very much for the opportunity to be here.

Senator MIKULSKI. Thank you, Mr. Ehrlich.

I am going to turn now to Joan Patterson and Nelson Brooks. Ms. Patterson and Mr. Brooks are Executive co-Directors of the UAW-Chrysler National Training Center.

This is a cooperative labor-management effort, and it is exciting in the way it addresses training needs. They are going to talk to us about the Center and the challenges they face in dealing with the changing work force.

In our earlier coffee conversations, Ms. Patterson came and spoke to us about the innovation there, and we have invited her back and asked her to bring her management counterpart. So we are really going to ask that you both talk—not simultaneously—but this way, we can hear the coordinated perspective.

Ms. Patterson has really been the very able representative of UAW on this, and I believe Mr. Brooks, of course, is one of the tycoons from Chrysler.

Mr. BROOKS. Well, I'm glad you said that. [Laughter.]

Ms. Patterson, I am going to ask you to kick it off from the workers' perspective and then you, Mr. Brooks, to talk about it from the management perspective, essentially what the center is and why was it even created in the first place, and the mutual self-interest from both of your perspectives that makes it such a workable and very interesting model.

Ms. Patterson.

**STATEMENTS OF JOAN PATTERSON AND NELSON BROOKS, CO-EXECUTIVE DIRECTORS, UAW-CHRYSLER NATIONAL TRAINING CENTER, DETROIT, MICHIGAN**

Ms. PATTERSON. Thank you.

I want to say on behalf of United Auto Workers, and certainly on behalf of Owen Bieber—I couldn't let that pass—I want to thank you for the opportunity to be here and represent United Auto Workers.

If I could just take a few minutes. hopefully to bring folks up-to-date. I kind of like the title "Executive Co-Director", but I would like to say to you that before I got that title, I was a worker in the plant, and I think I represent some of what you are going to be talking about, which is the Workforce 2000.

One is that I actually started at Chrysler Motors, and my title was "checker-packer". Many of you may not know what that is. A checker-packer is a pick-packer. That doesn't help, either, but that is a long way from checker-packer to Executive Co-Director, and having the opportunity to now talk about training and talk about being competitive in the marketplace, and sitting with my counterpart, Mr. Nelson Brooks.

Let me just say that from the UAW's perspective, or labor's perspective, we are certainly about the business of facing the challenges and also looking at Chrysler Motors as a competitive employer. We would like to focus today, myself and Nelson, on how we have formed what we think is a partnership and how we think we can meet those challenges.

One of the things that we constantly read about and one of the things we know about is that folks always tell us about the technology challenges of the future. And what we really say to you is that the UAW and Chrysler Motors and basically American industry at large would like to lead technology and not just keep pace with it.

We know that there is going to be a tremendous amount of technology advancement, and with that, we know that that will bring competitive pressures. And those pressures, by the way, are not just on Chrysler Motors as a company, but those pressures are also on the human resources located inside those plants on an everyday basis.

Let me just say that we formed our partnership basically with what we call bankruptcy, and I think most of you here in Washington know about that. At Chrysler in 1979, we had to create a partnership, and we had to create one simply for the fact that we had to talk about survival, which was talking about job security and keeping Chrysler Motors alive.

We formed that partnership by talking about a quality vehicle. Later on in 1985, through negotiations, we formed another partnership, and that one was then to guide and direct what we call training programs and also what we call support programs. Those support programs were to help what we call active and laid-off workers.

Some examples of programs that we presently have dealing with literacy—we sometimes call them different names, but the names are really not the key—we do deal with a course called tech-prep, which really is basic skills. We have negotiated tuition assistance programs. We are involved in child care. We do have programs that deal with personal financial planning, and we do deal with dislocated worker assistance. And certainly, we deal with new technology training.

In addition to that, we have some new and certainly innovative initiatives, which is that we use words like "worker participation" now and "team concept".

We have another emphasis in terms of the automotive world. We have now begun to focus on what we call the family life, and we try to provide training and educational pursuits for the spouses, children, and grandchildren of UAW representative Chrysler workers. We have been able to do that at six regional centers throughout the United States.

We also——

Senator MIKULSKI. Do you want to talk about when those grandchildren and the workers and the teachers get together, because one does not usually think of grandchildren around hubcap assemblies or fuel injection power trains and four-wheel drive Cherokees and things like that.

Ms. PATTERSON. Well, we all have to learn one way or the other.

Senator MIKULSKI. Tell us about that Saturday morning program that you mentioned to the committee—or maybe Mr. Brooks will go into that.

Ms. PATTERSON. OK. The family education pursuit that the Senator is mentioning is one where we believe a good example is that if you teach the family, you teach the worker. The best example we can give you is in Newark, DE, where we opened up our family education center, we had tried to encourage the workers back in for basic skills. Many of the workers themselves would not participate, but once we sent out a need assessment, and we set up classes for the children of those workers, what we found was that the spouses came in as well as the children as well as the workers. We have whole families who have now enrolled for basic skills classes in Newark, DE.

I was recently there for a dedication where we have, as I said, sisters, children, grandchildren all in what we call computer awareness or computer literacy kinds of classes. I can only say to you—and I use the example of myself—I am three generations of working in the manufacturing process, which is a company that makes cars. My father migrated from Louisiana and worked at Ford Motor Company. My mother worked in Chevrolet, and I work at Chrysler, and my son works at Chrysler.

Now, let me just say that those are very proud words for us out of Detroit, MI. It is by being a part of the manufacturing process that the automobile industry has allowed us to make a very good living and a good standard of living and offered us the opportunity to work very proudly and pay our taxes in this country. And we would hope that other people would feel just as proud of that as we are.

So when we talk about family and family commitment and actually having families as part of the training, they do come to the UAW-Chrysler training centers, come to learn together, and in many cases not thinking that they are going to go on to become management personnel, but simply hoping to encourage their own kids to maybe go on to college, or maybe just enhancing their skills. Believe it or not, that happens around the United States with employees of Chrysler and the membership of the UAW.

Right now, one of the other things we have been very encouraged with from the labor standpoint is that we have been able to convince Chrysler Motors to build an onsite child care. We have heard people talk about child care, and we are breaking ground down at Huntsville, AL, where the work force is over 2,000 employees, and 70 percent of that work force is made up of females. And we know by the year 1991, it will be open. It will be able to accommodate 148 children per shift, with expansion up to 222, and will also accommodate what we call mildly sick children. That is another initiative that we have.

In addition to that, outside of the bargaining arena, and for those of you who do not know, when Nelson and I sit here today, talking about jointness and partnerships, actually, tomorrow at 10 a.m. we open up negotiations, and we go across the table to now negotiate all of the things that we are talking about today. I hope it is going to be easy because I think we have been learning—

Senator SIMON. Can't you just solve it right here?

Ms. PATTERSON. We're not going to start today.

Senator SIMON. OK.

Ms. PATTERSON. One of the things that I think has been a good experience for both of us is that we do both agree, and certainly I think on behalf of UAW-Chrysler, that joint activities and a partnership is a learning experience for both parties, but it is something that you have to work at on an ongoing basis.

Let me mention one other thing because I saw you looking up at the clock. We have a youth program, one that we are very encouraged with, where we did not have to negotiate that across the table. It is not inwriting. We provide training programs to young people from the ages of 13 to 18, and we provide about 20 different career courses of study. In addition to that, someone mentioned females. At Chrysler Motors, we have been able to convince them that we need to take a look at the 16 percent of the work force which is female, knowing that it is going to increase anywhere from 25 to 30 percent, and we are in the process now of setting up programs which will bring skills to females and minorities especially in the skilled trade area.

In addition to that, we have been able to bring women together, union, management, hourly, salary, and management, and our theme, believe it or not, is also working women, looking to the year 2000.

We have one other program that—it is a slow program, but one in which the initiative for us on the labor side and management, which is the literacy problem. We call it "tech prep", and our reason for doing it is that if you can picture—and I'm not going to tell you my age—that I am the "average" age of the Chrysler work force, I do have a high school education, and I was very fortunate to go back to school after 13 years, but many of our workers have not had that opportunity, and many of them, I would say to you, are sometimes reluctant to let other people know where their skill levels are. So we refer to basic skills or literacy training as "tech prep", meaning that we are talking technical preparation.

In that way, our workers are able to learn how to become better readers; they become more involved with computers; they are able to refresh their math skills; some of them are able to get high

school diplomas; and some of them become better communicators and get G.E.D.s.

Here again, I just would like to say to you from the labor standpoint that many workers have been away from what we call the traditional educational scene, and when we talk about moving toward to Workforce 2000, you have to give them a sense of confidence about themselves, and you have to build into the workplace and into the educational system a comfort level for them to come back. And while we talk about younger people entering the work force, believe it or not, Nelson will share with you that the work force that we presently have is the one that is going to be there in the year 2000.

Senator MIKULSKI. Thank you, Ms. Patterson.

There are a lot of things we want to pick up on that, but Mr. Brooks, let's hear from your side of the labor-management table first.

Mr. BROOKS. OK. I'm just going to basically expand a little bit on the comments Joan has made.

Let me make this comment, I think, before I get started. The very fact that we can sit here together as a team, the day prior to the opening of national negotiations, is indicative that things are changing drastically, particularly in our industry, as far as labor-management is concerned.

Joan and I will both be playing major roles in the upcoming contract negotiations, but we can laugh and joke today about things, and we'll do that same thing as we go through negotiations.

One of the things I want to do is talk a little bit about what we think are some of the challenges facing our industry and Chrysler in particular.

Joan has mentioned several things, but one of the pieces I decided I would address in more detail is the issue of skills shortage or skills gap, as some folks like to refer to it. And I think the best way to do that is to give you an example of what I am talking about.

In Chrysler we think that, more than literacy, as you often hear addressed in the media as being the reason for the skills gap, in our industry we think it may be the rapid advances in technology that are causing the problems.

For example, if you look back at the situation at Chrysler in the early 1980 and you look at our stamping plants, Chrysler had no high-tech press lines at all in our stamping plants. Today, we've got three. What that has done is created a need for very highly-skilled technicians that we have to somehow go out and try to find. I had a difficult time doing that, and trying to train them was also a very difficult task.

We anticipate that in the very near future we are going to be putting additional high-tech press lines, very similar to what I just talked about, in our plants, and then again the issue becomes how do we go about getting the necessary skills to run these particular lines and maintain the equipment.

Another example is if you look at how we now build automobiles in our assembly plants, we have a thing called "vision systems" that we use for gauging automobile bodies for dimensional integrity. We started out just a few years ago with zero; now we have 59 systems in our plants, and those systems require very, very highly-

skilled technicians to maintain them. We found that we did not have those technicians in the work forces, and we had to go out in some cases and contract with vendors to maintain the equipment, somewhat to our disadvantage.

What we plan to do and what we are doing through the National Training Center to address this issue of skills shortage is we have embarked upon something we think is quite unique. We just opened about 3 weeks ago a skills training center to focus primarily on new technologies that are going to be put into the Chrysler plants and facilities. We are very excited about this approach because we think we will be able to train the individuals that we need to maintain our plants and equipment, as opposed to how we did in the past, when we had to go out and rely on other people to do so. We think this approach will also allow us to do at a substantially reduced cost as opposed to how we used to do it several years ago.

We are going to be doing things, for example, like training people in how to maintain robots, coordinating measuring equipment, and some of the very latest and most advanced technologies that are coming into the automobile industry.

We think we'll be able to cycle through this technology training center upwards of 1,400 employees per year. We currently have 40 skilled tradesmen as we sit involved in training programs of a very highly-skilled nature.

Another thing we have done to look at this issue of technology and what to do about it from a joint perspective is that we have contracted with the American Society of Training and Development to do a very comprehensive technology study of Chrysler Corporation and to come back with recommendations as to how we can go about formulating training programs to get out in advance of the technology that we know is going to be hitting our industry, as opposed to what we did in the past, where we more or less waited until it was there. And we have found through experience that that is too late. We think we've got the mechanism in place through our joint program to develop in-house the kinds of technicians and skilled tradesmen that we need.

Getting away a little bit from the technology aspect—

Mr. BROOKS. Very quickly, we are going to be looking at the changing composition of our work force. We know that there are going to be fewer workers available in the future because of the declining birth rate and things of that sort. We know that our work force is getting older; as Joan indicated, the average age of Chrysler employees is 44 years of age. We know about the issue of more women coming into the work force, naturally more minorities. Currently, about 25 percent of Chrysler's population is minorities.

The issue of more immigrants is going to be very important to us as we go into the year 2000 because we anticipate that we'll have a great many Hispanics; we've got a very large Arab population now in our organizations. And we will be designing training programs to address those issues of individuals not being able to speak the language and things like that.

We see that there is going to be a greater need for education and skills training, and we think the programs that we now have in place will be able to address those.

Thank you.

Senator MIKULSKI. Thank you, Mr. Brooks.

[The joint prepared statement of Ms. Patterson and Mr. Brooks follows:]

JOINT PREPARED STATEMENT OF JOAN PATTERSON AND NELSON BROOKS

MY NAME IS JOAN PATTERSON. I AM THE EXECUTIVE CO-DIRECTOR OF THE UAW-CHRYSLER NATIONAL TRAINING CENTER, REPRESENTING THE UNITED AUTO WORKERS. I AM HERE TODAY WITH MY COUNTERPART FROM CHRYSLER CORPORATION – MR. NELSON BROOKS - - TO TELL YOU ABOUT THE CHALLENGES WE FACE WITHIN THE UAW AND CHRYSLER IN TODAY'S COMPETITIVE MARKETPLACE AND HOW WE HAVE MET THOSE CHALLENGES.

- TODAY, WE ARE FOCUSED ON THE TECHNOLOGICAL CHALLENGES OF THE FUTURE. UNFORTUNATELY, THE CHALLENGE FOR THE UAW, CHRYSLER MOTORS, AMERICAN INDUSTRY AT LARGE AND ALL AMERICANS IS TO LEAD TECHNOLOGY – NOT JUST KEEP PACE WITH IT.
- LOOKING TO THE FUTURE, WE CAN ANTICIPATE A CONTINUATION OF THE TREMENDOUS TECHNOLOGICAL ADVANCEMENT WE'VE SEE IN THE PAST DECADE. FOR THE MOST PART, THIS TECHNOLOGICAL REVOLUTION WILL BE DRIVEN BY COMPETITIVE PRESSURES.

TO MEET THE COMPETITIVE PRESSURE. THE UAW AND CHRYSLER HAVE JOINED FORCES TO MAXIMIZE THE POTENTIAL OF OUR HUMAN RESOURCES. WE BEGAN THIS PROCESS AFTER THE NEAR-BANKRUPTCY OF CHRYSLER IN 1979-80.

- o THE UAW-CHRYSLER NATIONAL TRAINING CENTER WAS CREATED AS THE RESULT OF THE 1985 NATIONAL AGREEMENT BETWEEN THE UAW AND CHRYSLER MOTORS. THE UAW-CHRYSLER NATIONAL TRAINING CENTER IS NOW GUIDING AND DIRECTING 45 DIFFERENT TRAINING AND JOINT ACTIVITY PROGRAMS IN 41 LOCATIONS IN THE U.S. REPRESENTING 68,000 HOURLY AND SALARIED EMPLOYEES.

  THESE PROGRAMS INCLUDE TRAINING AND RETRAINING OF BOTH ACTIVE AND LAID-OFF WORKERS, AS WELL AS A WIDE VARIETY OF SUPPORT SERVICES.

A FEW EXAMPLES INCLUDE: TECH PREP (BASIC SKILLS), TUITION REIMBURSEMENT, CHILD CARE, PERSONAL FINANCIAL PLANNING, DISLOCATED WORKER ASSISTANCE, AND NEW TECHNOLOGY TRAINING.

- OUR EMPHASIS HAS BEEN A CONCENTRATED FOCUS ON FAMILY LIFE, AND PROVIDES TRAINING AND EDUCATIONAL PURSUITS FOR THE SPOUSES, CHILDREN AND GRANDCHILDREN OF UAW-REPRESENTED CHRYSLER WORKERS WHICH ENABLE ALL OF THEM TO PARTICIPATE AT REGIONAL CENTERS AND OTHER LOCATIONS.
- THE CHILD CARE PROGRAM INCLUDES A RESOURCE AND REFERRAL SERVICE AND AN ON-SITE CHILD CARE CENTER CURRENTLY UNDER CONSTRUCTION AT HUNTSVILLE, ALABAMA. OVER 2,000 WORKERS HAVE UTILIZED THE RESOURCE AND REFERRAL SERVICE AND THE ON-SITE CENTER IN HUNTSVILLE WILL SERVE THE NEEDS OF OVER 2,000 EMPLOYEES AT THAT LOCATION WHEN COMPLETED. ADDITIONAL NEED SURVEYS ARE CURRENTLY BEING CONDUCTED AT FIVE (5) LOCATIONS.
- THE NATIONAL TRAINING CENTER TEACHES FAMILIES THE IMPORTANT ELEMENTS OF PERSONAL FINANCIAL PLANNING INCLUDING INVESTMENTS, BANKING, TAXES, MORTGAGES, INSURANCE, LENDING CREDIT, AND OTHER RELATED AREAS. BY PROVIDING TUITION ASSISTANCE, OVER 40,000

APPLICATIONS HAVE BEEN APPROVED FOR PERSONS TO ATTEND COLLEGES, UNIVERSITIES AND VOCATIONAL TECHNICAL SCHOOLS IN MICHIGAN AND OTHER AREAS OF THE COUNTRY.

- THE NATIONAL TRAINING CENTER FEELS THAT A WELL INFORMED AND EDUCATED CITIZEN IS EXTREMELY BENEFICIAL TO ANY COMMUNITY, AND PROVIDES NUMEROUS COURSES IN ADVANCED RETIREMENT TO PREPARE FOLKS FOR RETIREMENT WELL IN ADVANCE OF MAKING THE MOVE.
- BUT ONE OF THE MOST INSPIRING ACTIVITIES SPONSORED BY NTC IS A YOUTH PROGRAM, WHICH HAS TAUGHT THOUSANDS OF YOUNG PERSONS BETWEEN THE AGES OF 13 TO 18, UP TO TWENTY DIFFERENT CAREER COURSES OF STUDY. THIS COMPLEMENTS THEIR HIGH SCHOOL CURRICULUM, MAKES GOOD USE OF THEIR TIME, KEEPS THEM OFF THE STREET, AND TEACHES THEM THE LATEST STATE-OF-THE-ART CAREER TRAINING, E.G., TELEVISION PRODUCTION AND BROADCASTING. OUR PURPOSE IN PROVIDING A WIDE RANGE OF TRAINING SERVICES TO THE WORKERS' FAMILIES, AS WELL AS TO THE

WORKERS, IS TO ENSURE THAT EDUCATION AND LEARNING BECOME A TOP PRIORITY IN THE LIVES OF THE WORKERS.

BY PROVIDING EDUCATION AND TRAINING PROGRAMS TO THE YOUTH -- WHO ARE SONS AND DAUGHTERS OF CHRYSLER WORKERS -- WE ARE ACTIVELY PREPARING THEM FOR THE NEW AUTO INDUSTRY THEY WILL BE ENTERING, A MUCH DIFFERENT INDUSTRY THAN THE ONE THEIR PARENTS ARE WORKING IN. ANOTHER CHALLENGE WHICH WE FACE AND WHICH FURTHER POINTS TO THE NEED FOR JOINT LABOR-MANAGEMENT COOPERATION RELATES, OF COURSE, TO FEMALES.

CURRENTLY, WE HAVE 16% OF THE WORKFORCE WHO ARE WOMEN. BY THE YEAR 2,000 THIS MAY INCREASE TO AS MUCH AS 25% - 30% OF THE CHRYSLER WORKFORCE WHO ARE FEMALE WORKERS.

- YEARS AGO, CHRYSLER WAS RELUCTANT TO HIRE WOMEN FOR MANY OF THE MANUFACTURING JOBS, BUT NOW THERE'S A SERIOUS SHORTAGE OF PEOPLE TRAINED IN THESE TECHNICALLY SOPHISTICATED FIELDS, AND WOMEN ARE BEING HIRED BECAUSE THEY ARE NEEDED AND BECAUSE THEY HAVE PROVEN THAT THEY ARE AS SKILLED AS MEN. THE UAW HAS BEEN IN A LEAD

POSITION TO INSURE THAT FEMALES ARE BEING HIRED. THE UAW-CHRYSLER NATIONAL TRAINING CENTER IS CURRENTLY DEVELOPING AN INTENSIVE, CONCENTRATED PROGRAM TO HELP WOMEN AND OTHER MINORITIES PREPARE ACADEMICALLY FOR TH DEMANDS OF THE SKILLED TRADES.

THE NTC HAS ALSO TAKEN A LEADERSHIP POSITION IN ADVANCING THE CAUSES OF WOMEN IN THE WORKPLACE. WE HAVE INSTITUTED A NATIONAL WOMEN'S COMMITTEE AND HOLD MEETINGS WHICH COVER FOUR (4) DAYS EACH ON A QUARTERLY SCHEDULE, WITH REPRESENTATIVES FROM ALL AREAS OF CHRYSLER, INCLUDING UAW-REPRESENTED WOMEN AT CHRYSLE IN BOTH HOURLY AND SALARIED JOBS, ALONG WITH WOMEN IN MANAGEMENT POSITIONS. THE THEME BEING "WORKING WOMEN...LOOKING TO THE YEAR 2,000."

- o ONE ACTIVITY WHICH THE NATIONAL TRAINING CENTER IS ESPECIALLY PROUD OF IS THE ORIENTATION SKILL ASSESSMENT, COUNSELING, INDIVIDUAL DEVELOPMENT, PLANNING, STRESS SUPPORT, REFERRAL AND RETRAINING OF

DISLOCATED WORKERS. ALONG WITH FOLLOW-UP AND JOB PLACEMENT SERVICES. MANY THOUSANDS OF PERSONS HAV AND ARE CURRENTLY BEING HELPED TO PROTECT THEM ANI THEIR FAMILIES.

- TECH PREP STANDS FOR TECHNICAL PREPARATION, AND THE TECH PREP CENTERS WERE DESIGNED TO PREPARE UAW-REPRESENTED CHRYSLER WORKERS FOR THE TECHNOLOGIC CHALLENGES OF THE TWENTY-FIRST CENTURY. THE TECH PREF CENTERS WANT TO HELP WORKERS HELP THEMSELVES. IT'S OPPORTUNITY KNOCKING AT THE DOOR.

  TECH PREP IS PRACTICAL EXPERIENCE THAT CAN BE APPLIED ON THE JOB OR AT HOME. MANY WORKERS LEARN TO BECOM BETTER READERS SO THAT THEY CAN BETTER USE JOB MANUAL THEY CAN LEARN ABOUT COMPUTERS AND HOW TECHNOLOGY I INTO THE WORKPLACE... AND WHAT THEIR KIDS ARE TALKING ABOUT AT HOME. THEY CAN BECOME MORE COMFORTABLE SPEAKING IN SMALL GROUPS OR BEFORE AN AUDIENCE. THEY CAN BRUSH UP ON THEIR MATH SKILLS FOR PERSONAL USE OR

APPLY IT TO MORE ADVANCED TECHNOLOGY. IT IS ALSO DESIGNED TO HELP THE ARABIC OR SPANISH SPEAKING WORKERS TO BECOME MORE FLUENT IN ENGLISH AS A SECOND LANGUAGE.

- WORKERS CAN USE THE TECH PREP PROGRAM TO:
  - IMPROVE THEIR READING AND WRITING SKILLS
  - REFRESH THEIR MATH SKILLS
  - FINISH THEIR HIGH SCHOOL DIPLOMA
  - BECOME BETTER COMMUNICATORS
  - PREPARE FOR THE G.E.D. EXAMINATION
  - LEARN HOW TO OPERATE A COMPUTER
  - SET PRACTICAL GOALS AND REACH THEM
  - PREPARE FOR COLLEGE STUDIES
- SOME WORKERS WHO HAVE BEEN AWAY FROM TRADITIONAL EDUCATION FOR MANY YEARS MAY HAVE DOUBTS ABOUT RETURNING TO A LEARNING ENVIRONMENT. IF A WORKER WANTS TO LEARN, TECH PREP WILL MAKE IT HAPPEN.

IN SUMMARY, JOINT TRAINING EFFORTS WORK. THE UAW AND CHRYSLER MOTORS ARE COMMITTED TO THE CHALLENGE THAT EVERY EFFORT WILL BE MADE TO INSURE MAXIMUM UTILIZATION OF BOTH HUMAN AND MATERIAL RESOURCES, AS WE STRIVE CONSTANTLY TO MAKE THE UAW-CHRYSLER NATIONAL TRAINING CENTER AND ITS PROGRAMS AN ORGANIZATION OF PRIDE AND CONFIDENCE. IN ALL OUR EFFORTS, HOWEVER, THE UAW-CHRYSLER NATIONAL TRAINING CENTER REMAINS EVER MINDFUL OF ITS ORIGINAL PURPOSE AND COMMITMENT: TO PROVIDE OPPORTUNITIES FOR OUR WORKERS TO ATTAIN MAXIMUM POSSIBLE GROWTH ANI DEVELOPMENT AS HUMAN BEINGS, WHILE ACQUIRING THE KNOWLEDGE AND UNDERSTANDING, THE METHODOLOGIES AND SKILL AND MOST IMPORTANT, THE MOTIVATING IDEALS THAT WILL ENABLE THEM TO ACHIEVE TRUE SUCCESS IN THEIR JOBS AND IN THEIR LIFE ACCOMPLISHMENTS.

NOW, I WOULD LIKE TO INTRODUCE MY COLLEAGUE, MR. NELSON BROOKS, OF CHRYSLER MOTORS.



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GOOD AFTERNOON. I AM NELSON BROOKS. AS JOAN INDICATED, I AM THE EXECUTIVE CO-DIRECTOR OF THE UAW-CHRYSLER NATIONAL TRAINING CENTER, REPRESENTING THE CHRYSLER MOTORS CORPORATION IN THIS JOINT EFFORT.

I WOULD LIKE TO EXPAND A BIT ON JOAN'S COMMENTS CONCERNING THE CHALLENGES FACED BY OUR INDUSTRY. THE RATE AND MAGNITUDE OF CHANGE IS ALMOST TOO GREAT TO IMAGINE.

- THE 1990'S WILL BE A TIME WHEN COMPETITIVE CHALLENGES, AS WE KNOW THEM, WILL INTENSIFY DRAMATICALLY.

FOR EXAMPLE:

- THE GROWTH OF NORTH AMERICAN TRANSPLANTS IN THE 1980'S HAS DRIVEN OUR INDUSTRY TO THE BRINK OF AN OVER CAPACITY DISASTER. BY 1992, EXCESS VEHICLE PRODUCTION CAPACITY IN NORTH AMERICA WILL TOTAL 2.5 MILLION UNITS ANNUALLY. THAT MEANS THERE IS THE CAPACITY TO BUILD 2.5 MILLION VEHICLES IN THE U.S. FOR WHICH THERE IS NO MARKETPLACE DEMAND. TO PUT THAT IN REAL PERSPECTIVE, THAT 2.5 MILLION VEHICLE OF EXCESS CAPACITY IS EQUAL IN

SIZE TO THE TOTAL OUTPUT OF CHRYSLER MOTORS IN THE 1989 MODEL YEAR!

- AT THE BEGINNING OF THE 1980'S, CHRYSLER'S STAMPING PLANTS HAD NO HIGH-TECH PRESS LINES. TODAY, THREE (3) HIGH-TECH SYNCROMATIC LINES ARE IN PLACE. THAT TECHNOLOGICAL ADVANCEMENT REQUIRES 27 HIGHLY SKILLED TECHNICIANS TO OPERATE AND MAINTAIN IT. IN THE NEXT FIVE (5) YEARS, SYNCROMATIC LINES AT CHRYSLER WILL DOUBLE TO SIX (6) -- AND WE WILL NEED 50 TRAINED TECHNICIANS TO MAKE THE TECHNOLOGY EFFECTIVE.
- TODAY, WE HAVE FOUR (4) TRANSFER PRESSES IN THE STAMPING DIVISION, SUPPORTED BY 27 RETRAINED UAW-CHRYSLER MEN AND WOMEN. BY 1994, THERE WILL BE 17 TRANSFER PRESSES IN STAMPING. 45 MORE OF OUR PEOPLE MUST BE TRAINED AND PREPARED TO INTEGRATE WITH THE INCREASED TECHNOLOGICAL REQUIREMENT.
- WE WENT FROM ZERO VISION SYSTEMS FOR OPTICAL GAUGING IN 1980 TO 59 TODAY. THESE 59 GAUGING SYSTEMS UTILIZE OVER 1,500 INDIVIDUAL OPTICAL AND LASER SENSORS.

VISION SYSTEM...150 UAW-CHRYSLER MEN AND WOMEN WILL BE REQUIRED TO CAPITALIZE ON THIS EXPANDING TECHNOLOGICAL FRONTIER

ONE MAJOR PART OF OUR CHALLENGE, OBVIOUSLY, IS CHANGING TECHNOLOGY AND THE SKILL SHORTAGES CREATED BY THIS CHANGE. EACH TECHNOLOGICAL ADVANCEMENT REQUIRES MASSIVE TRAINING INVESTMENTS.

FOR INSTANCE:

- AT INDY. FOUNDRY -- 104,000 HOURS OF TRAINING PRECEDED THE LAUNCH OF IMPACT MOLD TECHNOLOGY.
- 119,000 HOURS OF TECHNICAL AND PROCESS TRAINING AT KOKOMO TRANSMISSION SUPPORTED THE ULTRADRIVE (A604 LAUNCH).
- MOST RECENTLY, 1,900 TRENTON ENGINE EMPLOYEES WERE EXPOSED TO MORE THAN 90,000 HOURS OF TRAINING SKILL DEVELOPMENT IN PREPARATION FOR THE 3.3 LAUNCH.

IN ADDITION TO SKILL SHORTAGES AND THE MASSIVE TRAINING INVESTMENT DICTATED BY TECHNOLOGICAL CHANGE, WE FACE INCREASINGLY SEVERE COMPETITIVE CHALLENGES AT A TIME OF

WE KNOW THAT THE U.S. BIRTHRATE IS DROPPING AND THE LAST OF THE "BABY-BOOMERS" ARE IN THEIR MID - TO LATE 20'S. THE AVERAGE AGE OF THE AMERICAN WORKFORCE IS INCREASING, AND AT CHRYSLER THE AVERAGE IS HIGHER THAN THE NATIONAL AVERAGE (44 YEARS).

WOMEN AS A PERCENTAGE OF THE WORKFORCE WILL APPROACH 50% BY THE YEAR 2000. CURRENTLY, WOMEN ARE 16% OF CHRYSLER'S WORKFORCE.

MINORITIES COMPRISE 25% OF CHRYSLER'S WORKFORCE TODAY. BY THE YEAR 2000, ONE-THIRD OF NEW WORKERS WILL BE MINORITIES.

THE BULK OF OUR WORKFORCE HAS HISTORICALLY BEEN WHITE MALES. IN THE FUTURE, THEY WILL MAKE UP AN INCREASINGLY SMALLER PORTION OF CHRYSLER'S NEW WORKERS.

CLEARLY, THESE CHANGES IN OUR WORKFORCE PRESENT EDUCATION AND TRAINING CHALLENGES IN ADDITION TO THE DEMANDS OF NEW TECHNOLOGY. IT MEANS TRAINING FOR CURRENT WORKERS AND THOSE COMING INTO OUR PLANTS AND OFFICES. IT WILL INVOLVE LEARNING HOW TO WORK, COMMUNICATE, LISTEN, UNDERSTAND, AND COOPERATE IN NEW WAYS. IT EVEN MEANS WE NEED TO LEARN NEW WAYS TO TEACH AND TRAIN [illegible]

OUR EXPERIENCE THUS FAR HAS RECONFIRMED THE WISDOM AND EFFECTIVENESS OF A JOINT LABOR-MANAGEMENT APPROACH TO ADDRESSING THE SKILL NEEDS OF OUR WORKERS. JOINTLY PLANNING AND ADMINISTERING EDUCATION AND TRAINING IN THE REAL WORLD OF THE MANUFACTURING WORKPLACE ENHANCES CHRYSLER MOTOR'S COMPETITIVE POSITION, AND IT HELPS ENSURE THE JOBS OF OUR EMPLOYEES.

THE UAW-CHRYSLER JOINT TRAINING PROGRAMS REPRESENT AN ANNUAL INVESTMENT OF $33 MILLION. PART OF THE RETURN ON THIS INVESTMENT IS THE EXCITEMENT WE SEE KINDLED IN WORKERS AND THEIR FAMILIES IN RESPONSE TO OPPORTUNITIES FOR LEARNING. THE POSSIBILITY TO ACQUIRE NEW SKILLS, AND HENCE TO CONTRIBUTE IN NEW WAYS TO ONE'S WORKPLACE, FAMILY, AND COMMUNITY IS POSITIVE FOR EVERYONE. THE WORKER BENEFITS, THE COMMUNITY BENEFITS, AND THE EMPLOYER BENEFITS.

THE DEVELOPMENT OF NEW TECHNOLOGIES WILL OPEN UP A HOST OF NEW PROCESSES AND WAYS OF DOING THINGS, THAT INVOLVE EXPANDING HUMAN CAPABILITIES AND DIGNITIES IN A VARIETY OF

WAYS. THESE NEW PROCEDURES WILL REQUIRE WORKERS WITH MANY NEW SKILLS AS WELL AS TRADITIONAL ONES.

TO REACH OUR GOAL OF A PROPERLY TRAINED WORKFORCE, WE WILL HAVE TO HURDLE A VARIETY OF COMPLICATED TECHNOLOGIC, ECONOMIC, AND SOCIOLOGIC OBSTACLES, REQUIRING COMPASSION AND HUMAN INGENUITY. AS THE UAW AND CHRYSLER MOTORS STRIVE TO REDUCE PRODUCT COST WHILE CONCURRENTLY IMPROVING QUALITY, THE NATURE OF THE INDUSTRIAL WORKFORCE WILL CHANGE, OFFERING NEW JOB OPPORTUNITIES AND INCENTIVES.

THE UAW-CHRYSLER NATIONAL JOINT TRAINING CENTER IS A DYNAMIC ORGANIZATION ON THE MOVE. AN ORGANIZATION WITH PROGRESSIVE PROJECTS; AN ORGANIZATION WITH PLANS AND PROGRAMS WHICH ARE EXCITING AND IMAGINATIVE.

WE ARE LEARNING AS WE GO. BUT WE THINK OUR JOINT LABOR-MANAGEMENT INITIATIVE IS A MODEL FOR OTHERS TO EMULATE. WE KNOW THAT THE EDUCATION AND TRAINING NEEDS OF AMERICAN WORKERS CALL FOR THE BEST EFFORTS OF ALL OF US AS WE LEARN AND WORK TOGETHER.

Testimony by Joan Patterson and Nelson Brooks
National Training Center, UAW/Chrysler, Detroit, MI
Before the Task Force on Workplace and Workforce Readiness of the Senate Committee on Labor and Human Resources
July 19, 1990 -- 1:30 PM
Task Force Co-Chairmen: Barbara Mikulski (D-MD)
David Durenberger (R-MN)

REMARKS

Training America's workforce has become increasingly important:

- Employers spend about $30 billion per year in direct costs for formal training courses that they either provide themselves or buy from outside providers. An additional $90 billion to $180 billion is spent for informal, on-the-job training.

  The current average expenditure for employers is about 1 percent of payroll. Two percent of payroll is common for companies that include training as part of their strategic planning process.

- The manufacturing industry holds 18.7% of the total share of training, providing .9 courses per employee.

- Learning in school and on the job are by far the most important factors accounting for American economic growth and productivity in this century and will determine the nation's economic prospects in the next. In fact, learning on the job accounted for more than half (55%) of the productivity increases in the U.S. between 1929 and 1989, while machine capital contributed only 20%.

- New technology requires computational skills for operations, maintenance and control, as well as higher literacy skills for reading complex manuals.

- By the year 2000, 75% of all workers currently employed will need retraining because of changes in the nature of existing jobs or creation of new jobs which will require new and higher levels of skills.

- The nation's need for smarter workers is on a collision course with an ill-prepared labor supply. By the year 2000, 65% of America's new jobs will require education beyond high school, but even now thirty percent of students entering high school do not graduate. By the year 2000 almost a third of new jobs will require a college education, yet the number of college-age students will decrease by 25%.

Moreover, twenty percent of U.S. adults are considered functionally illiterate.

- Job-related training and education bears directly on individual opportunity. People who receive formal training on the job enjoy an earnings advantage of 25% over those with no such training. People who have had informal training on a prior job earn 20% more than those who had none.

- A 10% increase in spending for training raises wages by 1.5% but raises productivity by 3.0%.

But American employers do not invest enough in training in order to remain competitive in the global economy...

- Only 11% of American employees get formal training and only 14% get informal training from their employers to prepare for their jobs or to upgrade their skills.

- Of the $30 billion spent annually on training, $27 billion is paid out by only 15,000 employers -- only one-half of one percent.

- American companies currently spend far more on new plants and equipment than they do on training the people who will work in them. In 1981, corporations spent $3,300 per worker on physical assets and only $300 per worker on training.

- Fewer than 200 companies treat training as a formal, year-round activity.

- American auto industry trains more than most but not nearly as much as our competitors -- American production workers in the auto industry get less than 30% of the training given to Japanese production workers in auto plants.

- In Germany, 60% of young people go to work with a certified apprenticeable skill compared to less than 1% in the U.S.

- Japanese and European-owned companies based in the U.S. spend 3 - 5 times more on employee training than American companies spend.

(Unless otherwise noted, these facts are from Anthony Carnevale and Leila Gainer, The Learning Enterprise, and Anthony Carnevale and Janet Johnston, Training America, American Society for Training and Development and the Department of Labor, 1989)

Distribution of Training

- White workers receive a disproportionately large share of training compared with Blacks and Hispanics.

  Whites comprise 86% of the workforce and receive 92.2% of the training.

  Blacks and Hispanics comprise 15% of the workforce but only receive 7.8% of the training.

- Education leverages learning on the job. Persons with 2 years of formal education beyond high school have a 20% greater probability of getting training on the job than those who only have a high school diploma. College graduates have a 50% greater probability of getting training on the job than high school graduates. In high-tech industries, postgraduate education increases the probability of receiving training on the job by almost twice as much as a college degree.

Senator DURENBERGER. Before I introduce Dr. David Crawford, I am just reminded by all this talk about shortage of workers that I have a 23 year-old son who is six-four, a very healthy young man, a 1989 graduate of the University of Richmond, who is wandering around Washington with the broadcast journalism degree, looking for work.

Our next witness has already been a big help to us in a variety of ways, including help to this group. Dr. David Crawford was the Executive Director of the Secretary of Labor's Commission on Work Force Quality and Labor Market Efficiency. Their report was issued on Labor Day last year, and he will highlight the Federal role in addressing the challenges of the new work force.

**STATEMENT OF DAVID L. CRAWFORD, ECONSULT CORPORATION AND EXECUTIVE DIRECTOR, SECRETARY'S COMMISSION ON WORK FORCE QUALITY AND LABOR MARKET EFFICIENCY**

Mr. CRAWFORD. Thank you, Senator.

I am honored to be invited to address this distinguished committee regarding such an important issue.

The Towers Perrin Hudson survey shows us that many employers are concerned about the Workforce 2000 issues. Unfortunately, it also shows us that a significant share is unconcerned. And I expect that the survey systematically understates the percentage share of the unconcerned.

I say that because I expect that the unconcerned are much less likely to respond to such a survey. So I would caution the committee against taking comfort in some of the large numbers. Keep in mind that's the group that cared enough to respond to a survey.

If this hearing accomplishes nothing more than to expand the awareness of these issues, I think the hearing would be worthwhile, but I wish that this hearing could do more than that. I wish that this hearing could mark the beginning of a new Federal effort to help establish a substantial, coherent, and comprehensive national program of human resource development. We have never had such a program in this country but we desperately need one now.

The Workforce 2000 litany is by now well familiar. The aging work force means we need to worry more about retraining. The feminization of the work force means we need to worry about family-friendly work environments. The minoritization of the work force means we need to worry about investing in the skills of minorities and removing remaining barriers in the form of discrimination.

At the same time, most of us are expecting technological change to raise the skill requirements of jobs. I think many people believe—I am one of them—that the time when illiterates can anticipate high-earnings careers in some manufacturing industries and other industries are gone forever.

Unfortunately, we know that we've got lots of illiterates. There is a terrific new book that just came out that Forrest Chisman and Associates put together, called Leadership for Literacy. In that book, Chisman reports that 20-30 million—20-30 million—adults do

not have the basic skills required to function effectively in our society.

Each year, more such adults leave our high schools. Millions of adults are almost unemployable because they are unskilled and untrainable—untrainable because of illiteracy and innumeracy.

Illiterate workers may well be able to do some of today's jobs, but they are going to be very, very difficult to retrain in the future.

I have put more detail about these trends in my written testimony. Let me cut to the chase. What are we going to do about this?

Many people are spending a lot of time and energy looking for simple, quick, and preferably inexpensive fixes. I am convinced that such silver bullets do not exist. I am further convinced that it is time to quit wasting time and energy looking for them.

In my opinion the only promising approach is a national commitment to a broad spectrum of substantial and sustained investments in America's human resources. This commitment must be joined by every level of Government and by the private sector, but the leadership and a substantial portion of the new funding must come from the Federal Government.

The Bipartisan Commission on Work Force Quality and Labor Market Efficiency, appointed by former Labor Secretary Ann McLaughlin, called for such a commitment on Labor Day 1989, in its report entitled "Investing in People: A Strategy to Address America's Work Force Crisis."

Almost a year later, the call by that very distinguished a genuinely bipartisan group seems to have gone largely unheard, with the notable exception of the interest expressed by this task force.

Our national human resource program has got to address a wide range of problems, from the developmental needs of preschool children to the retraining needs of 55 year-old workers with obsolete skills. Let me briefly discuss some of the most important features of such a program.

First of all, by way of preparing children for school, we know that right now less than 40 percent of eligible 4-year-olds can get room in Head Start programs. The Bush administration has proposed increases that would raise that figure to roughly 80 percent of 4-year-olds. That is clearly not enough. We need to increase funding to make the program available to all 4-year-olds, and we need to include the 3-year-olds, which is going to increase the cost.

As we move down the life cycle, we have to worry about what is going on in the schools. We have compelling evidence that much of the shortfall in student performance is coming from a shortfall of effort. In many cases, students see no incentive to work. The Work Force Quality Commission that I worked with proposed that we need to make high school achievement a more important part of the employment process after high school; that if employers begin to care about high school achievement more, then presumably the students would begin to care more. So that commission called for the development of understandable transcripts and voluntary achievement tests to document achievement.

Mr. Magaziner's commission that he is going to speak about in a few minutes has proposed the use of a certificate of initial mastery which would certify basic competencies to employers and others.

The exact form of the documentation is not so important as the basic idea of using the labor market to provide incentives for students.

The implementation of that idea is going to require the support of Federal and State governments as well as the business community.

Now, just as the labor market could be used to motivate some students, the promise of postsecondary education or training could be used to motivate others. Imagine, if you will, a world in which no parent or student thought of cost as a barrier to postsecondary education or training. In such a world, academic interest and career aspirations would certainly be heightened. We have seen a few individual philanthropists create that sort of mindset for small groups of disadvantaged students, but only a greatly expanded government program of income-tested grants and loans could make the mindset universal.

As we move further down the life cycle, we know that we're going to have needs for adult basic education. No matter what we do to improve the schools, we are always going to need to provide a second chance to adults to develop literacy and numeracy skills.

We are always going to need the opportunity for adults to learn English as a second language. This country is strongly committed to public education of children and teenagers, but adult education is supplied by an uncoordinated patchwork of ill-conceived and underfunded public programs, untrained volunteers and corporate programs created largely out of desperation.

I believe that it should be the responsibility of government to provide effective, professional basic education to adults on demand.

Unfortunately, we know very little about the pedagogy of adult basic education. We do know, however, that long waiting lists and high dropout rates diminish the effectiveness of our public programs. We also know that no number of highly-motivated and well-intentioned amateur volunteers can ever hope to deal with the severe learning disabilities that handicap many adult literates.

What we have to do in this country is get serious about adult basic education. For details, I refer you to Forrest Chisman's book; it is all in there.

Coming to government training programs, we know that roughly 5 percent of the eligible population can be covered by existing JTPA programs; we know it is the wrong 5 percent. We know that there is a creaming problem going on, and we are not reaching into the bottom of the severely disadvantaged population.

The Job Training Partnership Act Advisory Committee, the Work Force Quality Commission, and various legislative proposals have called for a restructuring of JTPA eligibility rules and performance standards to eliminate the creaming problem and refocus JTPA on the basic skill needs of the disadvantaged population. This committee would know far better than I, but it is my sense that no legislation is anywhere near passage.

Once JTPA is refocused, its funding level, which has fallen by over 25 percent in real terms since its inception in 1982, has got to be increased. Both the JTPA Advisory Panel and the Work Force Quality Commission have called for increased funding, but I regret

to say that I perceive no serious prospect of such increases being supported by the Administration or the Congress.

Another major portion of our national program has to be employer-provided training. We know that some companies are making substantial investments in their workers' skills. Unfortunately, the Towers Perrin Hudson survey confirms our fears that many employers are not choosing to make such investments. The reasons for those choices, I think, are complicated, but we do understand some of them fairly well.

One major problem is the portability of workers' skills. When firms invest in capital equipment, they have no fear that that equipment is going to get up and walk away. Trained workers, on the other hand, may leave, and when they do they will take their skills with them. In that sort of situation, the new employer reaps the benefit of the first employer's investment.

This same sort of problem exists in basic research. Many firms benefit from the research efforts of a single firm. In the case of basic research, we deal with the problem in two ways. We encourage firms to investment together, and we provide public subsidy. Both of those methods hold promise for employer-provided training.

The second barrier that some employers face, particularly some small employers, is a lack of knowhow regarding training. Clearly, there is a place for government to collect and disseminate information regarding best practices. Again this committee would know better than I, but my sense is that the Employment and Training Administration of the Department of Labor is beginning to play such a role.

Another barrier to employer-provided training is the growing shortage of trainable workers that I have already discussed. To solve that problem, we need the public programs that I have already discussed.

What we need is more employers to see their employees as opportunities for investment rather than as costs to be minimized. As the skills of trainable, experienced workers become obsolete, employers should look at the trainability as a valuable asset that is going to be difficult to buy on the open market. Public policy can create an environment that encourages private investment in workers' skills. The Work Force Quality Commission proposed a tax incentive. Mr. Magaziner's commission has proposed a French-style system of mandatory training expenditures. Again, the exact form of the approach is not so important as the basic idea. We have to get employers to invest more in their workers, and we have to use public policy to do it.

A final point. In the 10 months since the Work Force Quality Commission published its final report, I have given dozens of speeches on work force issues, and someone always asks about the so-called budget realities. We should, of course, be concerned about the Federal budget deficit, but we also must be concerned about what I see as a national skills deficit.

The Work Force Quality Commission expressed its concern about the budget deficit but concluded nevertheless that there was "likely to be a clear and pressing need for a sustained increase in Federal expenditures for human resource programs."

Amid talk of $50 billion, $100 billion, and this week even $168.8 billion deficits, it is important to keep in mind that even an extra $5 billion per year divided among Head Start, student grants and loans, adult basic education, JTPA and training incentives could produce dramatic results in coming years.

Yes, we have to have more investment by States in the private sector, but the Federal Government must provide leadership and new funding.

I regret to say that I see now hope that the Bush Administration is going to provide effective leadership or call for significant new funding. My hope is that the Congress may take the lead, and I see no better candidates than this task force.

Budget realities are not the only realities. There is also the reality expressed by the Work Force Quality Commission when they said: "We must not accept a work force that is undereducated, undertrained, and ill-equipped to compete in the 21st century." And make no mistake about it, that is exactly what we are talking about if we don't get serious about investing in people—a work force that is undereducated, undertrained, and ill-equipped to compete in the 21st century.

Thank you.

Senator MIKULSKI. Thank you, Mr. Crawford. You also came and spoke to our coffee group, and I know that you, in your public-spiritedness, came back and also briefed our staffs on the bipartisan report; and we thank you for your work in that.

[The prepared statement of Mr. Crawford follows:]

## PREPARED STATEMENT OF DAVID L. CRAWFORD, Ph.D.

### INTRODUCTION

I am honored to be invited to address this distinguished Committee regarding such an important issue. As you know, there is growing concern about the American workforce, concern about its quality and about its future. The new Towers Perrin/Hudson Institute survey shows us that a significant proportion of American employers share that concern. The survey also shows, however, that many employers are still unconcerned, and I expect that the survey systematically understates the percentage share of the unconcerned. I say that because I expect that the unconcerned are much less likely to respond to such a survey. For this reason, I interpret the Towers Perrin/Hudson report as bad news.

If this hearing accomplishes nothing more than expanding awareness of these issues, the hearing will be worthwhile, but I wish that this hearing could accomplish much more. I wish that this hearing could mark the beginning of a new federal effort to help establish a substantial, coherent, and comprehensive national program of human resource development. We have never had such a program in this country; we desperately need one now.

### DEMOGRAPHIC AND ECONOMIC TRENDS

As we look to the future, we see demographic and economic trends that pose significant threats. Many of these trends were described in Workforce 2000.

**The Aging Workforce.** As the "baby boomers" age and the "baby busters" enter the labor force, the average age of the labor force is going to increase. There will be a growing need to retrain experienced workers in order to meet

needs for new skills because new workers will be in short supply. A few employers are already responding creatively to the aging workforce, but the Towers Perrin/Hudson survey suggests that most employers are doing little or nothing to respond to the aging of the workforce.

Beginning soon after the turn of the century, when the baby boomers begin to retire, the employed percentage of the total population is going to shrink. Since the employed must produce all of the goods and services consumed by the population, the productivity of the future workforce will have to increase to carry a heavier burden. If productivity does not increase quickly enough, the average standard of living will fall and intergenerational political debate will become much more heated than it is today.

**The Feminization of the Workforce.** The continuing movement of large numbers of women into the workforce will cause more stress for workers, both women and men, who have to balance family and job demands. To attract and retain the desired skills in tight labor markets, employers will increasingly need to provide "family friendly" work environments featuring schedule flexibility, dependent care programs, leave programs, and the like. Some employers, particularly some large employers, have already begun to introduce such innovations. Unfortunately, as many have suspected and the Towers Perrin/ Hudson survey confirms, many employers are doing little or nothing to help employees balance the demands of work and family.

**The Growing Minority Role.** Minority group members, particularly blacks and hispanics, will be the other major source of future labor force growth in many parts of the country. It will be increasingly important to improve the labor

market skills of minorities and to remove any remaining labor market discrimination. If we can accomplish the former, the latter is likely to be easier than ever before because of anticipated shortages of skilled workers. There will be a real opportunity to bring formerly disadvantaged populations into the economic mainstream, but only if we, as a nation, invest in their labor market skills. When I say "as a nation," I mean both private investments by employers and public investments through government training and education programs.

**Freer World Trade.** Although we occasionally backslide in response to calls for protectionism, there seems to be a general trend toward more open world markets. As American firms face more and more foreign competition, the productivity of American workers will become more and more important. Adaptability of American workers will also become more important when changes in world markets lead to rapid changes in the skill requirements of American employers.

**Technological Change.** We expect that technological change will increase the skill requirements of many jobs. Already, some truck drivers are asked to operate hand held computers; some janitors are asked to operate complicated machinery and deal with fractions in measuring cleaning materials. The days when illiterates could easily have high-earnings careers in manufacturing and other industries are gone forever.

In a valuable new book titled Leadership for Literacy, Forrest Chisman reports the unfortunate fact that "at least 20 to 30 million adults do not have the basic skills required to function effectively in our society... ."

Each year more such adults leave our high schools as both dropouts and graduates. Millions of adults are almost unemployable because they are unskilled and untrainable - untrainable because of illiteracy and innumeracy.

To make matters worse, many people believe that technological change is accelerating, so that the life cycles of products, technologies, and industries are becoming shorter. Shorter cycles will result in more rapid obsolescence of workers' skills, heightening our need for retraining systems. Illiterate workers may be able to do some of today's jobs, but they will be very difficult to retrain in the future.

**The "Skills Gap".** Put all of these trends together and what are we going to have? We are going to have a "skills gap" - too few people who have the skills that employers want and too many people who do not.

**SO WHAT CAN WE DO?**

Many people have sought simple, quick, and preferably inexpensive fixes for the skills gap. I am convinced that such "silver bullets" do not exist and that we should stop wasting time and energy looking for them. The only promising approach is a national commitment to a broad spectrum of substantial and sustained investments in America's human resources. This commitment must be joined by every level of government and the private sector, but the leadership and a substantial portion of the new funding must come from the federal government. The bipartisan Commission on Workforce Quality and Labor Market Efficiency (hereafter the Workforce Quality Commission), appointed by former Labor Secretary Ann McLaughlin, called for such a commitment on Labor Day 1989 in its report titled Investing in People: A Strategy to Address

America's Workforce Crisis. Almost a year later the call by that very distinguished and genuinely bipartisan group seems to have gone largely unheard with the notable exception of interest expressed by this Committee's Task Force on Workforce and Workplace Readiness.

Our national human resource program must address a wide range of problems, from the developmental needs of preschool children to the retraining needs of fifty-five year old workers with obsolete skills. I shall briefly discuss some of the most important features of such a program.

**Preparing Children for School.** Most experts believe that Head Start works, but, at current funding levels, less than 40% of eligible four year old children and very few three year old children can enter the program. The Bush Administration has proposed a funding increase that would expand coverage to approximately 80% of eligible four year olds, but this is not nearly enough. We should move immediately to include all eligible four year old children as well as three year olds and any five year olds who are not in kindergarten.

**Incentives for Students.** There is compelling evidence that much of the shortfall in achievement by American students (relative to their international peers) is due to a shortfall in student effort. It is also clear that many students see little reason to put forth effort. New incentives would be created if employers began to use evidence of school achievement to evaluate young job applicants. If good students could count on getting good jobs, we would have more good students, but right now employers have difficulty identifying the good students. The Workforce Quality Commission proposed the development of understandable high school transcripts and voluntary

achievement tests to document student achievements in a wide variety of academic and vocational areas. The Worklink project organized by the American Business Conference, the National Alliance of Business, and the Educational Testing Service is already developing a computer system that could make school and test records available to employers. In an important new report titled America's Choice: High Skills or Low Wages!, the Commission on the Skills of the American Workforce has proposed the use of a Certificate of Initial Mastery that would certify basic competencies to employers and others. The exact form of documentation is not so important as the basic idea of using the labor market to provide incentives for students. The implementation of this idea will require the support of federal and state governments as well as the business community.

Just as the labor market could be used to motivate some students, the promise of postsecondary education or training could be used to motivate others. If no student or parent thought of cost as a barrier to post-secondary education or training, academic interests and career aspirations would certainly be heightened. A few individual philanthropists have created such a mindset for small groups of disadvantaged students and parents, but only a greatly expanded government program of income-tested grants and loans could make the mindset universal.

**Adult Basic Education.** No matter what is done to improve the schools, there will always be a need to provide basic education for adults. Some will need a "second-chance" to escape illiteracy and innumeracy; others will need an opportunity to learn English as a second language.

This country is strongly committed to public education of children and teenagers, but adult basic education is supplied by an uncoordinated patchwork of ill-conceived and underfunded public programs, untrained volunteers, and corporate programs created out of desperation. I believe that it should be the responsibility of government to provide effective professional basic education to adults on demand.

Unfortunately, we know very little about the pedagogy of adult basic education. We do know that long waiting lists and high dropout rates diminish the effectiveness of our public programs. We also know that no number of highly motivated and well-intentioned amateur volunteers can ever deal with the severe learning disabilities that handicap many adult illiterates.

We must get serious about adult basic education in this country. To do so we should establish a substantial research effort to understand adult illiteracy and its remediation, devote significant public funds to train teachers of adults, find effective ways to deliver basic skills education to employed people, and generally expand our public financial support of adult basic education.

**Government Training Programs.** Current JTPA programs reach approximately five percent of the eligible population, and it is the wrong five percent. Less than two years ago I visited a JTPA program that was training people to use word processors. I was told that to enter the program, one had to be a high school graduate and type 40 words per minute. At that time, and still today, employers in most cities were eager to hire such people without benefit of prior training in word processing. This is an admittedly extreme example of what has come to be called the "creaming" problem of JTPA. The Labor

Department's JTPA Advisory Committee, the Workforce Quality Commission, and various legislative proposals have called for a restructuring of JTPA eligibility rules and performance standards to eliminate the creaming problem and refocus JTPA on the basic skill needs of the disadvantaged population. This committee would know far better than I, but it is my sense that no legislation is anywhere near passage.

Once JTPA is refocussed, its funding level, which has fallen by over 25% in real terms since 1982, must be increased. Both the JTPA Advisory panel and the Workforce Quality Commission have called for increased funding, but I regret to say that I perceive no serious prospect of such increases being supported by the administration or the Congress. There seems to be no likelihood of a funding increase even for the Job Corps, the JTPA program with the most consistent record of cost-effectiveness.

**Employer Provided Training.** While government should be responsible for basic education, employers should be the principal source of investment in job-specific skills. Some well-known companies are already making substantial investments in their employees' skills. Unfortunately, the Towers Perrin/Hudson survey suggests that many employers are choosing not to make such investments. The reasons for their choices are complicated, but I think we understand some of them fairly well.

On major problem is the portability of workers' skills. When firms invest in capital equipment, they have no fear that the equipment is going to get up and walk away. Trained workers, on the other hand, may leave and take their skills with them. In such cases the new employer reaps the benefit of the first employer's investment. The same sort of problem discourages firms'

investments in basic research; many firms may benefit from the research investments of one firm. In the case of basic research, we address the underinvestment by encouraging firms to invest together and by providing public subsidy. Both of these methods can be applied to the case of employers' investments in training.

A second barrier that some employers face, particularly some small employers, is a lack of training know-how. Clearly there is a place for government to collect and disseminate information regarding best practices. This committee would know better than I, but my sense is that the Employment and Training Administration of the Department of Labor is beginning to play such a role.

Another barrier to employer provided training is the growing shortage of trainable workers that I have already discussed. We need the public programs that I have already discussed to expand the pool of trainable workers.

We clearly need more employers to see their employees as opportunities for investment rather than as costs to be minimized. As the skills of trainable, experienced workers become obsolete, employers should look at the trainability as a valuable asset that will be difficult to buy on the open market.

Public policy can help create an environment that encourages private investment in workers' skills. The Workforce Quality Commission proposed a special corporate income tax incentive to encourage employer-provided training. Most of our major international trading partners require employers to provide or subsidize worker training. The Skills Commission proposed that the United States establish a French style system of mandatory training expenditures. Again the exact form of the policy is not so important as the basic idea, that we must increase private investment in workers' skills.

**"BUDGET REALITIES" AND OTHER REALITIES**

In the ten months since the Workforce Quality Commission published its final report, I have given dozens of speeches on workforce issues, and someone always asks about the so-called "budget realities". We should, of course, be concerned about the federal budget deficit, but we must also be concerned about the national skills deficit. The Workforce Quality Commission expressed its concern about the budget deficit, but concluded, nevertheless, that there was "likely to be a clear and pressing need for a sustained increase in federal expenditures for human resource programs."

Amid talk of $50 billion, $100 billion, and even $168 billion budget deficits, it is important to keep in mind that even an extra $5 billion dollars per year divided among Head Start, student grants and loans, adult basic education, JTPA, training incentives, and related federal programs could produce dramatic improvements in the coming years. Yes, we must have more investment by states and the private sector, but the federal government must provide leadership and some new funding. I see no hope that the Bush administration will provide effective leadership or call for significant new funding. My hope is that the Congress may take the lead.

Budget realities are not the only realities. There is also the reality expressed by the Workforce Quality Commission when they said, "We must not accept a workforce that is undereducated, undertrained, and ill-equipped to compete in the twenty-first century." That is exactly what we are talking about if we do not quickly get serious about investing in people - a workforce that is undereducated, undertrained, and ill-equipped to compete in the twenty-first century.

Senator MIKULSKI. We now will turn to Mr. Ira Magaziner, who is President of SJS, Inc. and Chair of the Commission on the Skills of the American Work Force, that has come out with a report that has raised a lot of comment. The summary of his report was in Business Week June 25th, in which the lead headline says: "Business Shares the Blame for Workers' Low Skills". He has been in the Wall Street Journal as well. We are looking forward to his testimony because the news accounts of this report have certainly been provocative, and we are now looking to hear a first-hand account.

**STATEMENT OF IRA MAGAZINER, PRESIDENT, SJS, INC., AND CHAIR, COMMISSION ON THE SKILLS OF THE AMERICAN WORK FORCE**

Mr. MAGAZINER. Thank you. The report itself will be out next week.

I am going to apologize for being a little hoarse and disheveled. I started this morning in Zurich, Switzerland at an early breakfast at about midnight Washington time.

The reason I mention that, though, is I was with the head of a large Swiss company who I head to leave breakfast early to explain that I was coming back here, and he said something which is very germane to our topic today.

His company has subsidiaries around the world, and he said that in the United States now, they are moving to a form of work organization which is typical of what they do in developing countries as opposed to what they do in Europe—that is, that they are using less technology, and they are depending less on the workers to be critical thinkers. And the reason for that was because they were having trouble recruiting the kind of work force that they are used to having in Switzerland and in Germany and in France where they operate.

That is what I would like to focus on today. I do know I am among friends, and I should note this. I had the opportunity to cochair a commission with Bill Brock and Ray Marshall, two former Labor Secretaries, a 35-member commission that had a number of corporate CEO's, union leaders, leaders from the educational community. And as I look around this table, Towers Perrin is one of the sponsors of our study and contributed some of the staff, and Joan Patterson also contributed a staff member, and Owen Bieber was a member of our commission, and Cliff Ehrlich allowed us to interview Marriott at some length, and we learned a great deal in that; we also learned a great deal from David Crawford's report. So I feel very much among friends on this panel.

What I'd like to say to begin, we found something in the study that we did—and we studied a couple of thousand detailed interviews in over 400 U.S. companies, and spent on average a day or two at each company, really studying their work organization. We did the same thing abroad in six different countries—Sweden, Denmark, Germany, Ireland, Singapore, and Japan. And we studied labor market policies and education policies in six U.S. States and compared them to those countries. And the conclusion we came to,

which was not one we expected, was that we don't believe there is likely to be a skills shortage in the United States in the 1990's.

On the other hand, we would say that if we want a high living standard, we have to create a skill shortage, and then we have to fill it. Now let me explain what I mean by that.

If you look at the way the American economy has been developing over the past 15 years, there are a couple of facts that stand out. One is that our productivity improvement over the past 15 years has been at only about 1 percent per year compared to 3 percent per year as an economy prior to the past 15 years. We have grown our economy, our GNP, basically by throwing more people at the economy. We had the baby boom generation come into the work force, and more women begin to work, and because we have had more people working, we have created more GNP; but we have not had productivity improvement. As a result, real wages have fallen by over 12 percent in this period, so that the average worker is now earning 12 percent less in real than they did 15 or 20 years ago.

The problem is as we go into the Nineties we are no longer going to be able to throw lots of new people at the economy because of the demographic changes that are taking place; the baby bust generation is now coming into the work force, and for the first time in 1990, the proportion of the total population in work force age is going to go down for the first time in 20 years.

We had 40 percent of our total population working 20 years ago, and now we have 50 percent; now it is going to start to work its way down again. So we can't throw more people at it. We are going to have to find a way to become more productive again.

What we found as we interviewed companies in the United States is that over 80 percent of them that we interviewed—and we interviewed in proportion to their total weight in the work force by industry and by size of company—what we found is that over 80 percent of the companies expressed concerns about the kinds of workers they can attract and use. But those concerns, which kind of masquerade under the general notion of skills shortage, over 80 percent of them are defined as work ethic; it has nothing to do with can I read a paragraph, can I do algebra, or anything like that. It is work ethic. What they are looking for is people who will show up for work on time, be reliable, communicate well, and a general set of personality skills or reliability skills.

Only 30 percent of the people we interviewed were concerned about the Workforce 2000, and the vast majority of those were concerned mainly about day care for women or about English as a second language issues—not about, again, educational skills.

We found only 15 percent expressed any skills shortage concerns, and the basis for that was wage-driven. The biggest categories of skills shortage were for nurses and for skilled clerical workers, and those are traditionally, quote-unquote, "women's occupations" that still have over 90 percent women in them, and the pay, quite frankly, has been less historically than for other occupations that require a similar amount of education. It is not surprising that they are having difficulty attracting people to those occupations.

Similarly, the skilled craft trades was the other occupational shortage in that 15 percent. And if you look back 15 years ago, the

gap between a skilled tradesperson's pay and that of a college-educated professional was 2 percent; now it is 42 percent. So that also begins to explain why there may be a shortage there.

Senator DURENBERGER. Could you say that again, Ira?

Mr. MAGAZINER. Yes. If you take the total wage of a skilled craftsperson, an apprenticeable craftsperson, an electrician, plumber, and so on, and you compare it to the wage of the college-educated professional, 15 years ago in 1972, the cap was 2 percent; now it is over 40 percent, about 42 percent. And if you look back at the clerical worker that I mentioned versus the professional, 15 years ago the gap between a clerical worker and a professional was about 36 percent, and now it is over 80 percent.

Senator MIKULSKI. Could we clarify what a "college-educated professional" is, because that covers a wide range.

Mr. MAGAZINER. I'll come back to that, yes.

Senator MIKULSKI. One would say a nurse is a college-educated professional, and her income does not compare.

Mr. MAGAZINER. It doesn't reflect that. Yes, there is a specific category within Labor Department statistics for "professional" and "managerial". It includes people who are qualified as advanced education beyond college—engineers, doctors and so on—and it includes people who are in managerial positions, but not supervisor, above the supervisor level. And it is just the way the classifications are made up.

In any event, the key message that we discovered was that only 5 percent of the employers that we talked to—and they represented about 7 or 8 percent of the total employees—were concerned about educational skills. And those are the people that are represented around this table and that are represented on most commissions that one looks at and that one reads about in the news paper. They are the IBM's and the Xeroxes and the Marriotts and the Chryslers and the Fords and the Kodaks and the people whose CEO's have been concerned about these issues. But they represent only 5 percent of the companies.

When we looked at what the difference was between those 5 percent and the rest of the people we interviewed, it had to do with the way in which they are currently planning to organize work. I would say that this is the crux around which we think the issue is going to revolve in the next decade about whether we are able to improve productivity in this country sufficiently to stay competitive.

We are still organizing work in this country along the traditional mode that was first develop by Frederick Winslow Taylor in the early 1900's and popularized by Henry Ford—the kind of mass production system where basically what you did was divided work down into simple, 2-minute on average tasks, and you set up a line of people who basically did their 2-minute tasks over and over again, 700-800 times a day. We started that out in the automobile industry, but it spread throughout manufacturing and then eventually into all other business areas.

If you look at insurance back office, you'll see one person responsible for a couple of lines of a form, and then it gets passed on to somebody else, which is why when you have a question or a complaint, you can never find who the heck it is you're supposed to

talk to because everybody has their own two lines, and nobody has responsibility for the whole thing.

But that has been the traditional work organization that we have had throughout industry is to divide things down into simple tasks and then to have a class of people who started out as the industrial engineers and managers, but who have other titles in other industry, or 20 percent of the total work force, who basically plan the production. They are the people who tell you, "move your arm this way", "this is how your job is defined"; when a new product is introduced, they redefine the work organization and work processes. And basically, the 20 percent does the thinking for the organization.

Now, that mode of organizing work involves a lot of heavy administrative procedures which basically guide the way individuals are supposed to act. It is also not unknown in government, when government tends to regulate, for example, nursing homes, something I am familiar with, there is a stack of administrative guidelines that stand taller than I do which basically say you feed people this, and you do it this way, etc, to kind of guide specifically what the job tasks are.

That form of work organization was very efficient for its time and has now become inefficient for the following reasons. Number one, technology is now fungible around the world to a great extent, and people in low-wage countries can now buy the same machines we do and operate a Tayloristic system in the same way we do, with lower-wage labor. What that means is that if you are sitting in a high-wage country, you have to compete and get higher wages by introducing new products more frequently, by having a greater variety of products, by increasing your quality levels, and a variety of other things which get you a higher value added, a higher price for your product, or for your service, for that matter, and allow you to stay ahead.

The problem is that a Tayloristic work organization breaks down when you get more complexity in the workplace, because when you are introducing products every 6 months instead of every 5 years, when you've got to make it in 50 different varieties, instead of everyone gets it black, as Henry Ford did, when you have to change to make the products more complex and the services more complex, it becomes very difficult to regulate that process by administrative guidelines because the guidelines become too complex, and you create a huge bureaucracy.

In a number of the factors we looked at in this country, only 10 percent of the cost in the factory—and this is true in many automobile assembly plants—only 10 percent of the cost in the factory is actually people building the product. The other 90 percent is made up of people who feed the line, people who handle materials, people who do inspection, people who do re-work, supervisors, cost accountants, schedulers, production planners, three levels of supervisors—there is a whole range of bureaucracy that goes around the people actually building something, and the same is true in an insurance office or in many other work organizations.

It becomes very inefficient—those of you who follow football know that the more times you hand off in the game, the more times you are going to fumble, and the more times we hand off

product and services in a production organization, the more mistakes we make, so it becomes very hard to get good quality in this kind of complex organization.

What is now happening—and this is really the crux of the matter—is that beginning in Europe and in Japan, they began to develop new kinds of work organizations which centered around trying to remove the bureaucracy and decentralize decisionmaking down to the direct-line workers and give more and more responsibility for quality control, for material handling, for purchasing, for a whole range of activities to the direct-line workers, so you have teams of workers with computer stations who are multiskilled, who do their own machine maintenance, do their own parts ordering, their own cost accounting and so on, and you can get rid of the layers of bureaucracy above them.

Now, by doing that, you can both cut costs and increasing quality, and you can be more flexible in terms of new product introductions, product variety, and so on. And again, the same thing would hold in the service industry.

The problem is—and this is really the essence of what I want to communicate today—is that what we discovered is that by and large American industry is not moving toward these high performance, high productive work organizations; that what they are doing is making a different choice, and that is the choice of the Swiss gentleman that I had breakfast with; that is, a choice to say that I'm going to go for low wages in the United States instead of high skills. So what you see is a lot of American manufacturing companies moving to low-wage countries, and what you also see is a lot of people who cannot move, if they are retailers or wholesalers, beginning to use more and more temporary workers, part-time workers, workers that they cycle through simple jobs. We have over 20 percent of the workers in the economy now being contingent workers, by which we mean workers who basically you kind of keep on the payroll for a year or two, or you keep on part-time, you don't pay the same benefits to them, the wages never build up because they don't get seniority, and you kind of work with a low-wage/high turnover model.

That model has been growing significantly in this economy, and to do that model, you keep the job simple because you don't want to have a lot of training costs every time you turn these people over.

We have called our report "America's Choice: High Skills or Low Wages" because we feel that America is now opting for a choice, very silently and very gradually, for low wages. The 5 percent—and that may grow to 10 percent—of our companies are moving in the other direction; they are opting for high skills. But they are a small minority. Most of the companies are really opting for the low wage solution. And as a business strategy consultant, I can tell you that in the short run, the low wage solution can probably make you as cost-competitive as pushing for high productivity, and it carries a lot less risk with it because you don't have to invest in training, you don't have to reorganize your workplace, so it is less risky in the short term.

The problem with it, as the Chryslers will tell you and the IBM's will tell you, is that it is very hard to get high quality, world-com-

petitive quality, with a high turnover/low wage philosophy; that if you are really going to shoot for high quality, you've got to go to a high productivity work organization.

Now, in every industry—and people like Marriott are leading in their industry, and Chrysler in theirs—there are companies that are opting for high performance work organizations and high productivity, but they are still very much the minority in this country. That is why—and I won't talk about our recommendations because I am running out of time—but that is why our basic conclusion was that we have both a chicken and an egg problem here. A lot of the companies we talked to said I am not going to bet, as this Swiss gentleman did this morning, I'm not going to bet on America turning out highly educated, high-skilled workers, and therefore I am going to skill down my work and try to move toward low wages in this country. That is the chicken and the egg.

We don't have a high enough educated, high enough skilled group of people coming, so those companies like IBM, who are interested in high performance work organizations are more and more turning to more sophisticated recruiting to kind of skim off the top the people they recruit, as well as engaging in training.

The vast majority are saying I am not going to bet on that; I'm going to try to get my wages down, I'm going to try to get my benefits down. For an individual company in the short term, that may work, but for the country it is disastrous.

I will leave you with one final conclusion on this. Our commission, which was also bipartisan and which had representatives of many different constituencies, came to a fairly bold set of recommendations which we did not anticipate when we first started out. The reason we did that is because we felt that this was an issue that was going to get very, very serious in this country unless we dealt with it and that just putting bandaids on this one was not going to work; and that if we dealt with just what is on the table today, which are important issues, but if we dealt with just trying to get a little better literacy, with trying to deal with daycare, trying to deal with English as a second language, issues of this sort, which are important issues, but if that's all we do in the next 10 years, we are going to lose for having succeeded because we are not going to get the kind of work organization, the kind of productivity and the kind of highly educated work force we need to remain a high wage economy.

The alternative is very dire. If you look at the fact that we now have the most unequal distribution of income of any developed country in the world and that over the past 15 years, the top 30 percent of our income earners have increased from 54 to 58 percent of total income, and the bottom 70 percent have gone south, it is a very serious problem, and it is only going to get worse because the group that we are addressing ourselves to, if you look in this country right now, we spend $30 billion a year on training, but more than 70 percent of that goes to the college-educated already in the work force. Only 30 percent goes to the noncollege-educated.

What we systematically do in this country is that the 75 percent of the people who don't get 4-year college educations in this country are basically being de-skilled compared to the rest of the world. The 25 percent that graduate college, we are probably as well off as

anybody in the world, but where we fall down is on the other 70 or 75 percent, and the new work organizations depend on that 70 or 75 percent for productivity improvement. And that is where we really have to start addressing our attention, or we are going to have serious social problems and serious economic problems in this country.

Thank you.

Senator MIKULSKI. Well, thank you, Mr. Magaziner. As I said at your introduction, your comments were quite provocative.

We are not going to do this the way the usual hearings occur, where I go around the room and ask the same question and we operate that way. I am going to throw out a question, and I am going to throw it out to you, Mr. Magaziner, and if others want to jump in, they should. Then I'll ask Senator Durenberger to do the same, so that we can essentially for the next 45 minutes or thereabouts engage in a discussion among ourselves so that it does not follow, as I said, like a deposition type of hearing.

Mr. Magaziner, you had a lot of things to say about the American workplace, one of which is that American companies threaten to move overseas, and they are de-skilling their own people. Yet what I see is that some of the best things that are happening are when foreign-owned companies come into the United States, that first of all, foreign-owned companies are coming into the United States more and more. Part of it is our devalued currency; some of our corporations offer bargain basement prices. But when they do come, their work force picks up not only in terms of expansion in size but in terms of productivity.

We can look at that even in some of the automobile companies—Honda comes in, the Toyota joint venture in California. And at the same time we hear from some of our own American companies, "Shape up, or we're going to ship out." Well, that certainly inspires loyalty. Everybody wants to run and work with them; they have such a good, American attitude.

So what is happening is—and I am going to just throw this out—is that your observation that foreign companies are investing more in America and more in American workers than Americans are, and they are being more successful at it, may be because they have different attitudes toward their workers. They don't see the worker as the problem; they see how to increase product and profitability as an issue and as a challenge.

Mr. MAGAZINER. I think there are a lot of problems associated with foreign investment that I would rather not get into, because they are not the subject of this committee's work—

Senator MIKULSKI. Oh, I'm not encouraging it. I am the original "Buy America". But I "bought America" and then they moved out on me. [Laughter.]

Mr. MAGAZINER. I understand. But nevertheless it does matter who owns a company, Senator. But let's put that aside; that's not why we are here.

I think there are a number of good American examples of companies that have taken a different attitude toward their workers and have succeeded. We have documented quite a number of these in our report, and we tell one of a plant that IBM had in Austin which was a typical situation where the plant was supplying cir-

cuit boards to the PC factory elsewhere in the IBM system, and they were $60 million in the hole in terms of what that PC factory could buy boards from overseas, and the PC factory went to top management and said, "Hey, we can't keep buying from this plant in Austin; we've got to go out and source these things." The plant in Austin, because IBM had a commitment to try and make it work, basically reorganized the work system, started spending 5 percent of their payroll on training, started delegating work down, started doing all the things that needed to be done that are often associated with companies abroad, and turned that thing around in 4 or 5 years and has made up that $60 million gap and more. So there are American examples.

Senator MIKULSKI. But they are very few.

Mr. MAGAZINER. They are too few, they are too few.

Senator MIKULSKI. I mean, based on really your own report, they are too few, and in fact that's what you said——

Mr. MAGAZINER. Yes, there are too few.

Senator MIKULSKI. [continuing]. And that is what is in the Business Week article.

Mr. MAGAZINER. Yes.

Senator MIKULSKI. So the question is do we have a problem with the American worker, or do we have a problem with the attitude toward the American worker, and what do we need to change that.

Mr. MAGAZINER. I think you've got to work on both sides. I don't blame the American worker. I think the American worker is as good as any worker in the world. I think the issue is one more of management attitude toward productivity and work organization, and I think it is one of the educational system trying to keep up with what are going to be increased requirements for these high performance work organizations. And I think that the government has a role to play as a catalyst in both of those, and that if you look at why other countries have moved more rapidly toward high production work organizations than we have, it has not been because they are more altruistic. Basically, there were a series of government steps which caused it to happen.

In Germany, you are required to pay 3½ percent of your payroll into various training funds of your company; in France, it is 1½ percent; in Sweden, it is 2½ percent, and so on around the world. And these are things that government basically did which we shy away from doing, but which we think we need to start thinking more seriously about.

Senator MIKULSKI. What do the rest of you think about what I said?

Mr. Ehrlich. Well, I would share Ira's comment that it is how we organize work that does make a difference. Our experience has been that when in fact you do get people involved in decisionmaking and giving them a range of responsibilities, they do perform. People generally tend to perform up to the expectations you set.

I think manufacturing has come through hard times. I think the service industry in some respects has had a little bit of a lead because in the service business, your product is frequently your employee. I mean, we were not able to set up a different quality control procedure where we pulled product off the line. You basically can't do that when you are checking people in in a hotel; you can't

have a quality control checker there very well. You have got to give people the responsibility, and I think the service industry kind of came to grips with that a little bit earlier than manufacturing. But how you organize work is absolutely key to how people respond, and I think that has got to be one of the key findings and one of the key things that American business addresses in the next couple years.

Ms. PATTERSON. Let me just say that when you talk about work organization, and you are talking about actually management and decisionmaking coming from the top down, you are absolutely correct, but the process is a slow one. In Chrysler Motors, we have selected six plants where we are talking about worker participation. And we know for a fact that when you allow workers to make decisions about the workplace, you are subject to get better productivity as well as better quality. But here again we are talking about a tradition which is that we have always been in a position where you were talking management versus worker, and we are also talking about management being the person who is the authoritarian figure who then bosses the worker as opposed to the worker being able to influence or impact those folks and up.

It is a slow process, and I would just agree with you. I think some employees are trying it—certainly, Chrysler is. The other problem you have is that when you find a company such as Chrysler Motors, who still has to make a product and certainly has to be competitive, there becomes a cost factor even when you try to change from a traditional work organization to another organization, and that cost is one that they have to look at and certainly one that the labor movement has to look at, too.

Mr. LYNCH. I have learned never to question Ira's statistics, but I am surprised only 5 to 10 percent focusing on more the quality and productivity. I sense that there is a changing going on, that in the last 10 years or so, many companies focused on cost reduction, downsizing and so on, but many more are starting to realize the fallacy of that approach and are going to be looking to the productivity and quality improvement in their organizations that you are asking for.

Mr. MAGAZINER. I think, John, the difference is really looking where people are working in the economy. I think the kind of companies that you and we are used to consulting with tend to often be the ones who are larger and in the forefront of these kinds of movements. We were surprised at what we found, too, because the people we are used to consulting with are not that group.

But one of the things, when you really look at where people are working in the country, it is very different than what people who sit around tables like this often think. I mean, if you take all the lawyers and investment bankers and accountants and stockbrokers and so on and add them all together, even though they have a tremendous effect on the economy, there are only 2.5 million of them compared to 15 million clerical workers, 18 million shop floor workers. You've got 2 million agricultural workers compared to 800,000 doctors and dentists, and a lot of the clerical workers are spread around a lot of smaller companies or medium-size companies which really are not thinking this way; they are thinking basically, you

know, how do I meet next month's profit target. They are not really thinking about these issues.

Mr. CRAWFORD. I would agree with everything I have heard so far in response to your question, and I would add another dimension to it. Ira cited the example of IBM. IBM is widely known as a leader in making investments in its workers. It is also widely known for its full employment policy, which is that IBM almost literally never lays anyone off. There have been like seven cases, and they went back and fixed those—they sort of happened by accident.

If you look at the Japanese companies that have come to this country, they are the big, visible companies, and those companies tend to think in terms of lifetime employment.

Long-term employment horizons are one solution to the portability problem that I mentioned in my testimony. If employee and employer are thinking about a long-term relationship, the employer is naturally less concerned about losing his investment in the skills of the workers. So it is no mistake—it is not a random event that the IBM's that have a full employment policy are also leaders in education and training.

Senator MIKULSKI. But Dr. Crawford, workers leave for the same reason anybody else leaves—they leave because they are going to get a better deal someplace else, so therefore——

Mr. CRAWFORD. That's why they quit. That is not why they are laid off, Senator.

Senator MIKULSKI. Yes, I know, but when we talk about portability, one of the things that comes up is the way workers leave, and that they often leave to get a better deal, and a better deal either comes in wages or benefits, not only like health insurance but the new kinds of benefits. And I wonder if modern management is thinking about that or really is just once again saying, gee, after all I've done for them, they're leaving, even though I won't pay for health care costs or set up copayments—and God forbid that we would have flextime—I am talking about employers now over 100 workers——

Mr. CRAWFORD. Part of the challenge for employers is to continue to structure a work environment—and I mean that broadly defined—that will hold onto long-term workers. Part of that is family-friendly work environments, part of that is flexibility, part of that is having a career ladder that allows opportunities for individual advancement. Part of this long-term relationship is that the employer has to make it attractive to the employee in the long term so that they don't quit, as you point out, to go on to a better job.

Senator MIKULSKI. Senator Durenberger, I don't want to monopolize this.

Senator DURENBERGER. No, that's great; it is just hard to know where to begin.

Mr. EHRLICH. Just a comment comes to mind, listening to all of this. I don't have the benefit of looking at the world through Ira's or John's or David's eyes; I look at it through a very narrow lens called the Marriott Corporation. And I am just thinking that American business traditionally keeps looking for workers, and we keep finding human beings, and I think that is becoming more and more obvious, that people are looking for more, and the relation-

ship has got to be different than maybe the one that Joan started in when she went to work as a checker——

Ms. PATTERSON. Packer.

Mr. EHRLICH. [continuing]. I'm sorry—and that American business has gotten a lot smarter about what it has to provide in the work environment for people to in fact want to be productive and want to make a contribution. And I think that more managers are coming to that realization. I'd like to think that it is more than 5 percent, but—

Mr. MAGAZINER. I'd like it to be more than 5 percent.

Mr. EHRLICH. I am a little bit disappointed at those numbers.

Mr. MAGAZINER. We were surprised by the numbers, and we didn't expect it. In your own industry—and I can say this because you are going to be one of the best practice firms we use in your industry—but the average for the companies we interviewed in your industry said there was a 70 percent turnover rate. And yours is not there, but when you've got a 70 percent turnover rate, things like long-term investment in employees is not on the table.

Mr. LYNCH. But it is beyond, I think, what management is doing to address it, Cliff. I think what we sense is a change in worker values, what they want, the lifestyle they want, the flexibility they need, the dual-income families. It is an number of things. So it is more than management. I think the expectations have changed as well.

Is that what you are finding at Marriott?

Mr. EHRLICH. Yes, very much so. People do want to participate. They are not interested in the point-and-do jobs. They do want to have an involvement in what is going on. I am sure the effort that you are involved in, Nelson and Joan, is very much representative of that. I think that is typical. People who work for a living these days realize they have far more choices than they have had in times past, and they have certain criteria that the workplace has to meet for them to remain, and business just has to get smart and get on about the business of meeting those expectations.

Ms. Patterson. I don't want to sound like I'm giving a commercial for negotiations, but one of the things that we have looked at just as a labor movement is long-term job security. When I hear you talking about workers wanting to leave the workplace after being trained, that's kind of unusual in the organization that I come from, because most of the folks that we deal with in the auto industry are people who are trying to obtain seniority and retire with a pension. They are normally looking for that comfort level to say that that employer is going to remain and hopefully can stay competitive.

Training of those workers, believe it or not, in most cases they are more interested in on-the-job training sometimes than basic skills. Our own surveys within Chrysler Motors—which was even a surprise to me—have indicated at least 60 to 70 percent of the workers who are there would prefer to be trained relevant to the job. So as I said before, they are looking for long-term seniority rights or a relationship that says, "Hey, I'm going to be here if you're going to be here as an employer."

Senator DURENBERGER. I think what we set out to do not just today but as part of this task force is really to talk about the

worker and the workplace but having, like many of us here, I think, begun to focus on the workplace in a demographic sense with the Hudson Committee report for the Department of Labor a few years ago, I was happy to hear what Ira said about what I perceive to be the realities, and that is that if nothing changes, we're going to have a worker shortage. But let's hope that we've identified the problem not as a worker shortage but as a productivity shortage—that's what I heard you say—and let's work ourselves as a Nation, or let's produce ourselves a worker shortage.

I was also pleased by what I heard of the discussion by each of you on the issue of productivity. I think each one touched on it to some degree—Ira sort of focused it substantially for us—on something other than the worker.

But I need to step back and ask again the question that relates to the public policy solution. The business that we are in thrives in a "legislator should legislate" sense in providing answers to the demand from Dr. Crawford, which is public policy can help create an environment that encourages private investment in worker skills by corporate income tax incentives, and this, that or the other thing. I wear two hats. On this committee, I tell, I mandate; on the Finance Committee, I incent with some kind of a tax subsidy.

And I'm not sure that either one of those is the most efficient way to either help the worker or to get productivity in the system. The folks at the UAW have heard me 1,000 times on the subject of the unfairness of the current health insurance tax subsidy, which rewards a lot of folks who don't need it and penalizes people to need it substantially. But it is an inequitable way to use the tax incentive.

But then I heard IRA say—he was asked to give a European model—and he said, well, they have a 3 percent tax on something or other which goes into a training fund. I am first prompted to ask this question, which is do you believe that the success in some of the European countries in increased productivity in the workplace is because they have 3 percent taxes for training or retraining, or is it because they have better focused national economic policy?

In other words, in Germany, you know where Germany is headed; you know what their trade policy is, you know what their tax policy is, you know what their income security policy is. You know a whole lot of those larger public policy issues, which then makes management's utilization of financial resources, work resources and so forth more efficient. That's just as a starter question.

Mr. MAGAZINER. Well, it is a combination of things. The answer that I would give about what makes Europe and Japan and Singapore work in that regard is not necessarily complete what I would advocate for us to do because we are very different. But the fact of the matter is in those countries, in the case of Sweden, Japan and Singapore, you've got virtually full employment—you've got less than 2 percent unemployment rates—and in the other countries in Europe, in Germany, Switzerland and so on, it is very, very hard to lay somebody off, very costly to lay somebody off.

Those two factors drive companies to make certain kinds of decisions—and also there are mandated benefit levels; if you're going to hire temporary workers, you've got to pay them full benefits, and there is a very high minimum wage, and so on.

Now, having been a business strategy consultant in these countries, working for companies, I can go back even to the Volvo experience. Volvo was one of the first companies to move to high productivity work organization in the early Seventies. They did not do it because they got the great idea that this was going to be good for productivity. They did it because there was a full employment economy; they had highly educated kids coming out of schools, and they couldn't attract them into the manufacturing facility. When they attracted them in, because of the way social laws were written there, there was like 60 percent absenteeism and 70 percent turnover rates and so on and so forth, because people could stay out, and they did stay out because they were bored in their jobs. So Volvo started moving that way because it had to in order to get people, and it was a constraint-driven thing.

And in a lot of the German companies and Swiss companies I have worked with, it is very hard to lay people off, so you think harder about keeping them.

Now, if I look in this country, the companies that are out ahead, the IBM's, the Motorolas and so on have tended to have policies saying we want to try to avoid layoffs. The automobile industry basically has had negotiated contracts which say job security is important so they have started thinking that way, and so on. Now, I don't necessarily advocate, and our commission did not advocate, those things for the U.S., but that is the reality out there.

What I do think we could do, which would help in this country, is something as we have proposed where you say to companies, you should spent one percent of your payroll at least on training workers, and that should go up gradually over the decade—it is going to go up—and we'll let you spend it. It cannot be, you know, where is the bathroom, and that's 5 minutes of training while I showed you where the bathroom is; it has to be some kind of certified program. You laugh, but most of the training for the noncollege-educated is that kind of stuff in this country; it is orientation training.

I do think we could institute that, and let the companies spend it. If they don't spend it, and they could be certified on their unemployment tax forms so you don't have to create a new bureaucracy; if they don't, then let them pay the one percent into a skills development fund that would be administered by the State. So you let them spend the money themselves. If they have to do that, they'll start thinking about how to use skilled workers because they are going to have to be training them to be skilled. And they won't be at a competitive disadvantage because every other country we looked at has a tax like that—in fact, at a higher level. So we are the odd person out there.

I am talking for too long, but the one other issue I'd lay on the table as public policy that I think is the most fundamental one that we found in this whole thing is that we need to do something to professionalize the training of the non 4-year college-educated. In other countries they do it through apprenticeship programs or through labor market programs that kind of take kids at a certain

age, 16 and 17, and send 70 or 80 percent of them through 3- or 4-year programs that are very serious programs to prepare them to be hotel workers, manufacturing workers, retail workers.

In Switzerland and Germany, as Mr. Ehrlich knows, if you are going to become a hotel worker, you will take a three-year course that will teach you both academic subjects and work subjects, and you will combine it with training. If you are going to be a retail worker, you'll get trained in inventory policies, you'll get trained in communication skills. If you are going to sell clothing, you'll get trained in fabric, in dyes, in styles, so that you know the products you are selling, and you'll take a serious 3-year course and get a certificate that is rewarded by the industry, and you have professionalized to a greater extent the noncollege-educated track.

That to me is the most important thing we can do in this country.

Senator MIKULSKI. I want to come back to something again to raise discussion. I'm going to give an assumption and then ask if you agree with the assumption and the definition and so on.

First of all, the assumption is that a family-friendly workplace is in the mutual interest of both the worker and the company—the worker, because it would be oriented to them and their needs; and to the employer, because it really does have an effect on productivity. By "family-friendly" I am talking about issues related to daycare, work scheduling, parental leave, education not only at the workplace but off the workplace, the opportunity to pursue a community college program and so on, and also recognizes the aging work force as well as the fact that workers have aging parents. Essentially, "family-friendly" recognizes workers in their roles as both mothers and daughters, and fathers and sons—mothers and fathers who worry about daycare, after-school programs and so on, but also workers as daughters and sons, with aging parents, the frail elderly that must be cared for, the long-term care plan that might need to be arranged—all of that.

Certainly in my own family, my sisters, who are younger than myself, would have concerns in both of those areas, and the wonderful men that they married are as worried about those issues as they are.

So the question then becomes: Do you agree that a family-friendly workplace is in the mutual self-interest of both the worker and the employer—my definition as to what is family-friendly—and also, if you agree to that,what would be some of the ways to achieve that not only in the mega companies, but also in mid- to small-sized businesses.

Mr. CRAWFORD. Senator, I sure would like to believe that that assumption is true, and my intuition says that it is true that a family-friendly work environment is in the mutual interest of workers and employers.

But the economist in me continues to be nagged by the followup question, which is if it is in the mutual interest of employers and workers then why isn't it universal.

Well, part of it is prejudice. I think another part of it is information. One of the things we discovered when we were working with our commission at the Department of Labor was how little re-

search there is that documents the employer's payoff from family-friendly work environments.

It is sort of obvious that the workers are better off. What we don't have is sort of hard, serious social science evidence that creating these environments translates into a bottom-line payoff for employers.

Many of us believe that that is true. What we need is the research agenda to document that. And we're not talking about enormous amounts of money. I believe that if you could get that sort of evidence, show it to employers, reveal their self-interest to them, then you would begin to see much more widespread implementation of the family-friendly programs of the sort that you are talking about.

Mr. LYNCH. I agree with David 100 percent. I think it is in the self-interest of the employer to have a family-friendly environment not just to attract the good workers, but to retain them. But the educationhas to go on before that. Not everybody knows how to attack that, what the self-interests are that are served by doing that. So I think it is an educational issue, and once we show that to senior management, I think they will do it. But it is in our interest, I agree with you.

Ms. PATTERSON. Let me just say that "family-friendly", I haven't heard that term, and it's fine with me——

Senator MIKULSKI. User-friendly factory.

Ms. PATTERSON. OK. I usually use words like "work and family life" kind of thing, but I think we're talking about the same thing.

I think what I find unusual, and certainly being female and having worked in a plant, is how can you talk about getting data when we've not really addressed problems like daycare and child care until recently with employers. For instance, we are now talking about the fact that we have just convinced the employer Chrysler Motors to build a child care center, but I have 24 years seniority with the company, and when I walked into the workplace it was not "family-friendly". I know for a fact that my absentee would have been down, and my productivity would have been up if I had not had to worry about children at home.

I think some things for us have to be somewhat of a common sense approach to life.

Another thing is that we have to speak to aging daycare or elderly folks. All of us have parents, and certainly if you go to work, regardless of whether you go to the auto industry or you go to the bank, but if you are at work, worried about your family, you are not going to perform in the same manner that you would perform if you did not have that worry and stress.

And when you talk about "family-friendly", what I think about is that in the labor movement we have negotiated things that address family issues—when we talk about health care, it is not for the worker; it is also for the family. We talk about dental care, vision care; in most cases, that benefit reaches out to families. When we talk about employee assistance around this country, regardless of whether it is Chrysler Motors, we talk about a family type of activity which would help that worker come in to work and better perform. That means if you cut down on absenteeism, you bring up productivity.

What has happened is that American companies have not or have just started in the last 10 years to actually take a look at family-friendly approaches. And I don't know where you get the data, as I said, but maybe just good common sense will prevail for many of us.

Senator MIKULSKI. Mr. Ehrlich, what do you say, because you cautioned us not to pass parental leave as a mandated benefit. I think that was in your comments——

Mr. EHRLICH. No, it wasn't.

Senator MIKULSKI. I'm sorry. What do you think about that because, you see, our reaction is in the absence of America's private sector seeing it in their self-interest, we then mandate it so they then see how terrific it would be.

Mr. EHRLICH. I think David nailed it with his comment, saying if it is true, why isn't it universal. I think that employers may find, if there is a worker shortage—we have experienced it in various parts of the country—if there is a worker shortage, one of the things you start to do is you do start to focus on the whole idea of retention, and one of the conditions you have to create is the work environment so that people want to be with you and want to remain with you , and when you start looking at that, you start doing the things that Joan just articulated, and you can put the label "family-friendly" on those, and I think it works.

We may find employers going in that direction because in fact it does meet their self-interest. But empirically, or intuitively, it seems to be right.

Senator MIKULSKI. Do you have any of those policies that I talked about at Marriott and a sense of how it affects the company?

Mr. EHRLICH. Well, we did a work and family survey that I did make reference to in my comments, and we found out that daycare is an issue, but what people were looking for varied all over the lot, so we have now started the first couple of steps to meet that particular need in our work force, to assist people in addressing that particular need.

The whole idea of leave, we have very liberal leave policies for people to assist them in making work and family adjustments.

Mr. MAGAZINER. I would just say that in 16 years of business strategy consulting, business people like most people tend to be shorter-sighted than they would like to be when they think about things more broadly; and even if they make speeches about being long-term, when it really comes down to it, very often they are shorter-term. I think there has never been a country where these issues that you are discussing have come about by kind of benevolent wisdom becoming apparent to everybody that this was the best way to go. It has always been mandated.

Senator MIKULSKI. Like where?

Mr. MAGAZINER. In Sweden, Germany, Denmark, Austria, Holland, Belgium, and France—you can go right down the list——

Senator MIKULSKI. Switzerland.

Mr. MAGAZINER. Well, Switzerland has some of the things you talked about, not all of them. But basically wherever these things have existed, they have been mandated, and then companies have adjusted to them.

We don't have a full employment policy. If we had a full employment policy, and we really got to the point nationally where there was a shortage of workers, then I think the kind of thing that Cliff is talking about would kick in. I think companies would then start competing for workers, and they would start giving benefits like these as a way of competing for workers. That happened in certain selected regions of the country for a period of time. But I think if you are going to want to get the kind of agenda laid onto the country that you are talking about, and I think even if we got all the information that David has talked about, I'm not sure you would convince a lot of companies to move in that direction without some kind of a general incentive, if you will.

Senator MIKULSKI. Well, Mr. Magaziner, you probably asked in your survey a lot of questions about attitudes. Has it been your observation—and then I'll ask this of Mr. Lynch and others who might want to comment—that essentially the American private sector always looks to technology improvements to move them or save them or improve them, rather than people improvements, so that they believe that as technology improves that productivity will, and that they put more money into, say, investing in a new microchip or a new kind of cash register or something else like that, rather than in their worker; that is is more oriented to technology, and in fact they are very frustrated that the workers are not as good as the technology.

Mr. MAGAZINER. Well, again, I'll sidestep for a second to say that I wish American companies were putting more money into technology. Real R and D spending is down in this country, and it has gone up 15 percent a year in Europe. But putting that aside, I think you are right. The Taylor work organization basically said you get your productivity improvement through new machines. That was the fundamental guiding force—new machines that replaced people was the way to get productivity. And I think that attitude is still the prevalent attitude in most of American industry, and I think what most CEO's I know would call the "soft issues", the issues of human attitude and human——

Senator MIKULSKI. Yes, it's not real stuff like finance.

Mr. MAGAZINER. Yes, it is harder to measure. I mean, you get that machine, you put it on the ground, and you know it is going to crank stuff out at 500 per second instead of 200 per second, and there it is; all you've got to do is get it up and going, and it is going to do it. OK. That's much easier to understand than I'm going to invest in people, and they are going to get better skills, and because their family life is better they are going to—how do you measure that?

So some of the best companies, like the Motorolas and the IBM's, are spending a lot of money now on trying to measure things like the productivity improvement that comes through training and so on, and we are just now beginning to get some good measures that show that.

But yes, you are right; most American companies are not looking that way right now.

Mr. LYNCH. I sense there is change, though, again, Ira. I can't point to the statistics, but you are hearing more CEO's use terms like "empowering our people" and "our key to future productivity

is not cost reduction, it is empowering the people and getting productivity out of people".

Mr. MAGAZINER. But the speech you make to the Rotary is not necessarily what you do—or at least there is lag between what happens. [Laughter.]

Mr. LYNCH. Yes, but there is at least a growing awareness that the human resources strategies are much more important.

Mr. MAGAZINER. Sure, sure. It is being talked about more, and that's a good first step, I think. And I think that is what your survey showed; more people were talking about it than were doing something about it, but the talking about it is a good first step; at least they're talking about it now.

Mr. EHRLICH. I think business success has been defined historically in either financial or marketing terms—earnings per share or market share have really been the terms of measuring business success. There hasn't been a similar term in human resource management, and I think now we have pretty well plumbed the opportunities that exist in financial management—there will certainly always be new ones—but we have been through an era of financial management and more emphasis on marketing, and I think we are coming around and saying you have customers, you have financial management, you have your employees, and we really have not paid much attention to this whole idea of employee management, and that is where there is a lot of momentum building.

Mr. CRAWFORD. Senator, I'd like to point out that if you believe that American employers are tipped away from investing in their workers, you can tip them back the other way with tax policy. That is, you can change the relative prices of different kinds of investments by creating corporate tax incentives. That is one way to get more investment and to change the calculation from the hard dollars and cents point of view. That is an alternative to going the way that Ira's group is suggesting of mandating; it is sort of a choice between carrot and stick.

Mr. MAGAZINER. I agree with David. We recommended one possible solution for that. There are others, including ones that David has talked about. But I would say it is particularly hard to make the human investment for a company because it comes off this year's income statement. You can take a piece of equipment, and you can capitalize it and amortize it over a number of years. If you are going to do something on training, it is not capitalizable; it comes off this year's income earnings, it comes off this year's bonuses for the management and so on and so forth. So there are also some things you can do perhaps in tax policy which talks about being able to amortize some of this, which might have some benefit.

Mr. CRAWFORD. There was an experiment going on at GAO—I don't know what became of it—where they were attempting to think about revising accounting practices to try to reflect assets that firms had in the form of their workers' skills. I do not know what has become of that exercise, but it would certainly be worth checking into.

Senator MIKULSKI. Well, it certainly does, because it is essentially what really does count, and do we actually count what really counts.

I am going to have to reluctantly wrap up this conversation. I am due to preside over the Senate at 4 p.m.

I want to thank all of the participants for their ideas; we didn't have a chance to go into all of them, but I think we've gotten a picture.

I think what probably emerges is that there is a quickening of need; however, there is not a felt urgency. And because of that, we have not mobilized our national will nor developed the strategies to do it in the way the Commission's report—does, and many of the other fine commissions and the experiences.

Over at Chrysler, they got their act together when they were going belly up; the U.S. Government came in and bailed them out, and they got to know each other because it was mutual survival, and then they decided it was mutual need, and they all got in the same lifeboat and rowed. That's how that happened.

We also have the experience of World War II, when people came out of the hollows and hills and fields of this country into the factories and into our military service. Some people had never even seen a book, let alone been in a school. Some could not read. And yet we found a way, through the United States military, to train them to read and save Western civilization.

Ms. Patterson, you talked about your dad coming out of Louisiana; I would imagine it was probably somewhat around that same time or going into it. The Rosies entered the workplace. We knew how to help with the Rosie the riveters. We had a daycare plan in this country during World War II. I don't ever want to see a war mobilize our resources again, but there is an economic war going on for America's future, which you have spoken about, Mr. Magaziner. And if we are going to compete, I think it is going to take that same kind of approach, the organizing of a will and a strategy, because I think when we put our minds to it, and we put our hearts to it, we come out pretty well.

So thank you very much for your participation.

[Whereupon, at 3:47 p.m., the hearing was concluded.]

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